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(www.cordeiro.org)

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The Future of the Future:
Education and Technology

The Millennium Project



Global futurist think-tank with 50 nodes around the world



The Millennium Project

2030 LATINO AMERICA

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The Millennium Project

Una lectura fascinante para cualquiera que se pregunte como será el mundo en el año 2030, y más allá.

Andrés Oppenheimer, Columnista del *Miami Herald* y coganador del Pulitzer Prize (Argentina)

Latinoamérica 2030 ofrece escenarios útiles al pensamiento y a la acción volcados a superar los grandes desafíos de la región, en su relación con el mundo global.

Fernando Henrique Cardoso, Expresidente (Brasil)

Esta publicación del Millennium Project es un aporte muy relevante que debería ser consultada por académicos, políticos, empresarios y todos aquellos interesados en contribuir a mejorar las condiciones de vida en nuestros países.

Eduardo Frei Ruiz-Tagle, Expresidente (Chile)

Información invaluable para el futuro de las Naciones Unidas, sus estados miembros y la sociedad civil.

Ban Ki-moon, Secretario General de las Naciones Unidas (Corea del Sur)

La idiotez latinoamericana es como la materia: no se destruye, sino se transforma. Esperemos que las próximas dos décadas no sirvan para repetir los errores de las décadas pasadas.

Carlos Alberto Montaner, Escritor y periodista galardonado (Cuba)

Una visión a largo plazo, de una Latinoamérica en continuidad desde Canadá pasando por Illinois, Nueva York, Florida y todo el suroeste de EUA, para llegar a la Tierra del Fuego.

Ramón Tamames, Político y economista galardonado (España)

Una lectura obligatoria para cualquier tomador de decisión con visión de futuro.

Enrique Peña Nieto, Presidente (México)

Durante años Latinoamérica ha vivido fascinada con el pasado. Para quienes creemos que es hora de fascinarnos con el futuro y hacerlo nuestro de una buena vez, este libro es una herramienta imprescindible.

Álvaro Vargas Llosa, Político y escritor galardonado (Perú)

Latinoamérica 2030 constituye una importante y rica herramienta de trabajo, que nos permite visualizar los escenarios posibles y plausibles que el futuro depara a nuestra región.

Leonel Fernández, Expresidente (República Dominicana)

Un libro fascinante para pensar y repensar el futuro de la región.

Diego Arria, Ex Secretario General Adjunto de las Naciones Unidas (Venezuela)

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WORLD ECONOMIC FORUM

COMMITTED TO
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World Economic Forum
on Latin America

Lima, 23-25 April 2013





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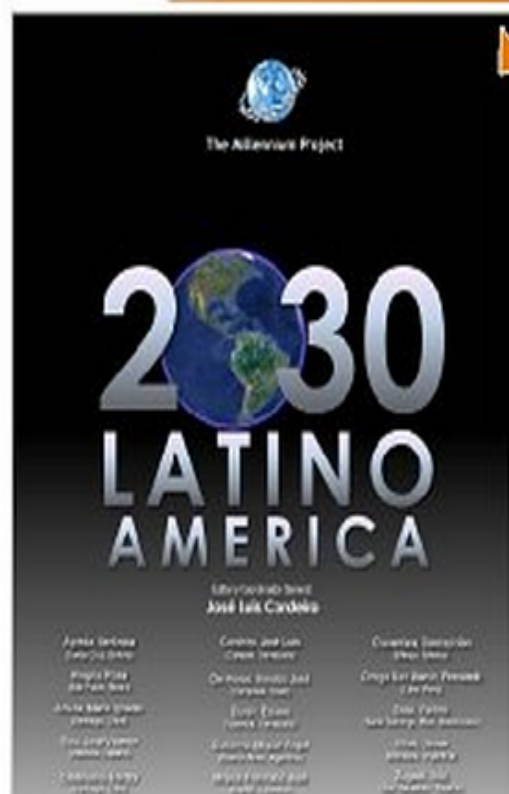
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Start reading *Latinoamérica 2030* on your Kindle **in under a minute**. Don't have a Kindle

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Latinoamérica 2030: Estudio Delphi y Escenarios (Spanish Edition) [Kindle Edition]

José Luis Cordeiro (Author)

★★★★★ ☐ (1 customer review)

Pricing information not available.

- Length: 171 pages (estimated) ☐
- Language: Spanish
- Don't have a Kindle? [Get your Kindle here.](#)



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The Millennium Project

A global foresight network of nodes, information, and software.

Functioning as a think tank **on behalf of humanity**, not on behalf of a government, an issue, or an ideology.

Created to improve humanity's prospects **for building a better future.**



Education and Learning in 2030:

- 1. National programs for improving collective intelligence**
- 2. Just in time knowledge and learning**
- 3. Individualized education**
- 4. Use of simulations**
- 5. Continuous evaluation to prevent instability and/or becoming mentally ill.**
- 6. Improved individual nutrition**
- 7. Genetically increased intelligence**
- 8. Use of global on-line simulations as a primary social science research**
- 9. Use of public communications to reinforce pursuit of knowledge**
- 10. Portable artificial intelligence**
- 11. Complete mapping of human synapses to discover how learning occurs**
- 12. Means for keeping adult brains healthier for longer**
- 13. Chemistry for brain enhancement**
- 14. Web 17.0**
- 15. Integrated life-long learning systems**
- 16. Programs aimed at eliminating prejudice and hate**
- 17. e-Teaching**
- 18. Smarter than human**
- 19. Artificial microbes enhance intelligence**

Software innovations in education

- **MIT+: OCW (OpenCourseWare)**
- **MIT-Harvard: EDx**
- **Australia: Moodle**
- **Silicon Valley: Khan Academy**
- **Silicon Valley: Udacity, Coursera**
- **Silicon Valley: Singularity University**



SOLAR, WIND, NUCLEAR

...WHAT'S NEXT?

Information you **NEED** to be a part
of the clean energy solution.



MIT Technology Review

BUSINESS REPORT

Digital Education

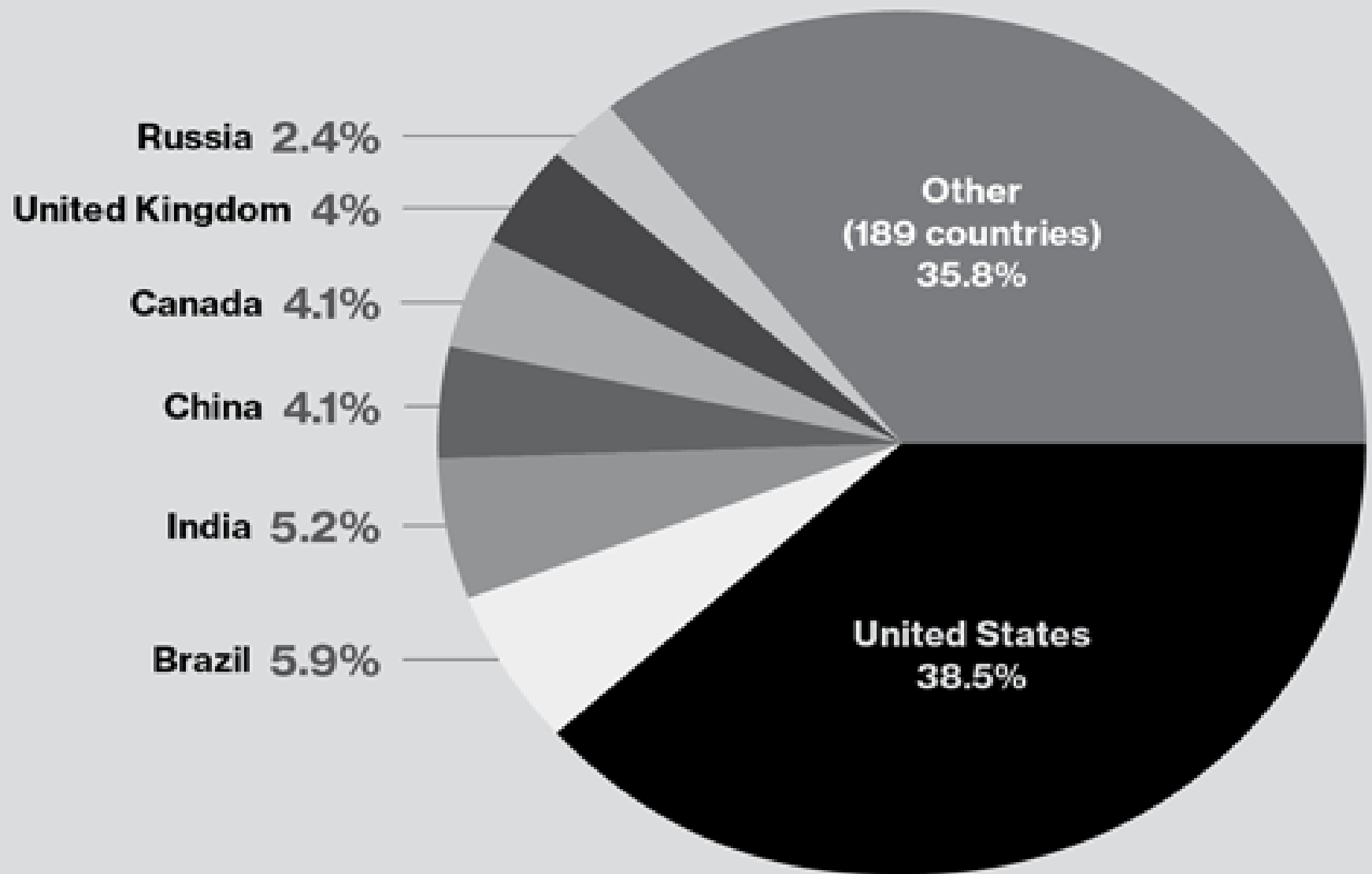
9 COMMENTS

Online Courses Put Pressure on Universities in Poorer Nations



Foreign Legion

Where users of free online college courses come from



Hardware innovations in education

- **Japan: Riken Brain Institute**
- **Korea: from books to tablets in 2014**
- **Korea: Robots as English teachers**
- **Silicon Valley: NeuroSky**
- **Australia: Emotiv**
- **Finland: tablets and “facilitators”**

The Evolution of Korean English Teaching Robots



2111

BRIDGESTONE

Samsung SMART TV

FedEx Express

[EL SHOW](#) [VIDEOS](#) [IMÁGENES](#) [BIOGRAFÍAS](#) [INTERACTIVOS](#) [SECCIÓN EXCLUSIVA](#)

ACERCA DEL SHOW



2111 es una serie histórica que permitirá descubrir cómo será Latinoamérica dentro de 100 años. A lo largo de 8 programas, encontrará las respuestas a los grandes interrogantes acerca del futuro: ¿Cómo serán nuestras ciudades dentro de 100 años? ¿Cómo nos transportaremos? ¿Cómo será la vida cotidiana del hombre del mañana?

Con 2111 develaremos el futuro a partir de pistas que ya existen en el presente. Conoceremos los proyectos más vanguardistas y sorprendentes del mundo, y los relacionaremos con nuestra región. También contaremos con el testimonio de renombrados expertos de la ciencia, la tecnología y la cultura. Todos ellos son los hacedores del futuro, y se ocuparán de acercarlo a la actualidad.

En cada episodio el Host viajará por Latinoamérica y el mundo. Al presentar e interactuar con los distintos desarrollos, será el hilo conductor de la historia y también quien le dará unidad y continuidad al relato, que por momentos transcurrirá en el futuro, y por momentos en el presente.

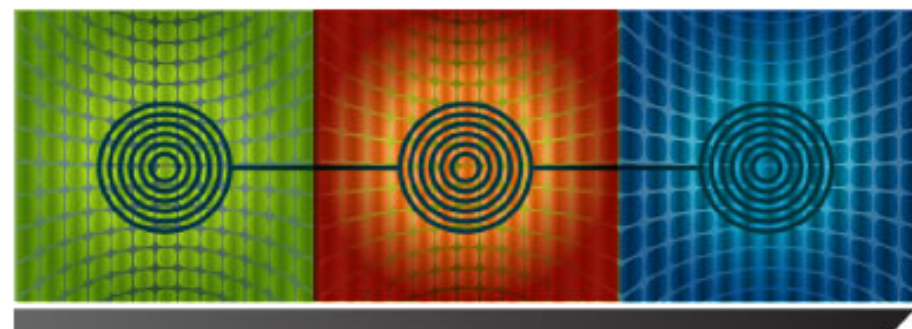
La inclusión de las más avanzadas técnicas de animación computada para construir ciudades en 3D, casas, espacios públicos, objetos o medios de transporte del futuro, será un recurso que estará presente a lo largo de todos los capítulos.

Las temáticas que abordará la miniserie serán:

- Arquitectura y Desarrollo urbano
- Vida cotidiana
- Transporte y Energía
- Entretenimiento
- Salud y Bienestar
- Trabajo y Educación

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Massachusetts Institute of Technology



How can people and computers be connected so that—collectively—they act more intelligently than any individuals, groups, or computers have ever done before?

While people have talked about *collective intelligence* for decades, new technologies now allow huge numbers of people all over the planet to work together. Google and Wikipedia suggest that the time is now ripe for **Collective Intelligence** is to understand how to take advantage of this power.

Our basic research question is: *How can people and computers act more intelligently than any individuals, groups, or computers have ever done before?*

The Center for Collective Intelligence brings together faculty from across MIT who study how communications technologies are changing the way people work together.

NEWS AND EVENTS AT THE CCI



- > CCI's Climate Collaboratorium receives seed grant from MIT
- > Audio recordings from fall 2007 CCI Seminar Series now available
- > Video from forum on "Collective Intelligence" with Tom Malone
- > Tom Malone and Mark Klein's article on the Climate Collaboratorium
- > Video of CCI launch Event (Requires RealPlayer 8.0+)
- > Edited Transcript of Prof. Thomas W. Malone's Remarks



Horizon Project

NMC Horizon Report

2014 Higher Education Preview

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Forum

ARTICLE

The Future of Universities

By : Michele Petoichi

May 11th 2012

0 Comments

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Suggested next articles



Global Agenda Councils

How do you round numbers? The

By : Krisztina "Z" Holly



Forum

How can we make sure every child

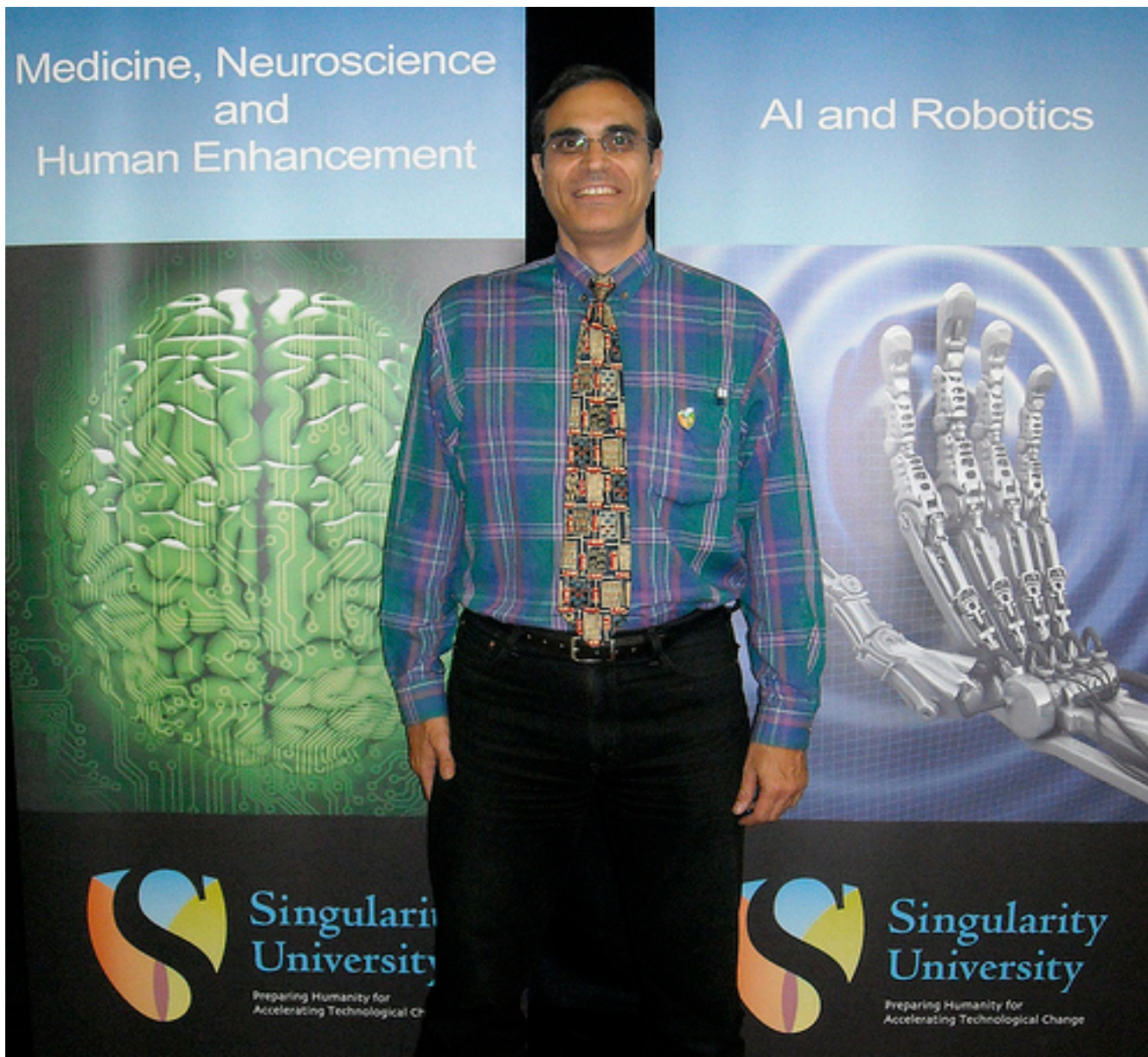
By : Gordon Brown

Forum on Twitter

Tweets by @davos



Singularity University





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Deadline:
February 10, 2014



Australia
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Deadline:
May 9, 2014



Brazil
Call to Innovation
Deadline:
March 16, 2014



Canada
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Colombia
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Indonesia
GIC
Deadline:
April 14, 2014



Italy
Call to Innovation
Deadline:
February 9, 2014



Israel
GIC
Deadline:
December 31, 2013



Malaysia
GIC
Deadline:
March 8, 2014

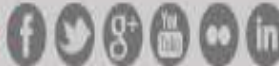
Realização

Sobre a FIAP

FIAP

Saiba mais sobre o centro de excelência em tecnologia mais premiado, prestigiado e reconhecido do país, parceiro exclusivo da Singularity University no Brasil.

www.fiap.com.br



Sobre a Singularity University



Conheça a instituição de ensino mais inovadora do mundo, criada para preparar líderes que possam compreender os avanços tecnológicos e aplicá-los para solucionar os grandes desafios da humanidade.

www.singularityu.org



Apoios:



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Conferência: The Singularity
University e as Novas
Fronteiras do Conhecimento

**Conferência: The Singularity University e as Novas Fronteiras
do Conhecimento"**

No dia 10/04/2014 será realizado (quinta-feira) no Anfiteatro
Leitão da Cunha , a conferência " The Singularity University
e as Novas Fronteiras do Conhecimento" com o
Conferencista José Luis Cordeiro, Singularity University, Nasa
Research Park, CA, USA,

**" The Singularity University e as Novas Fronteiras do
Conhecimento"**



Local : Anfiteatro Leitão da Cunha

Endereço: (Rua Botucatu, 740 - Campus São Paulo)

Horário : das 11:00 às 12:30



O fim chegou ao fim: *a ciência revela a* *Imortalidade*



com
Dr. José Luis Cordeiro

Revolution
in Egypt

Joe Klein: What the U.S. should do
On the Street: Hope meets anxiety
Muslim Brotherhood: What it wants

Oscars:
Portraits of
star power

TIME

2045

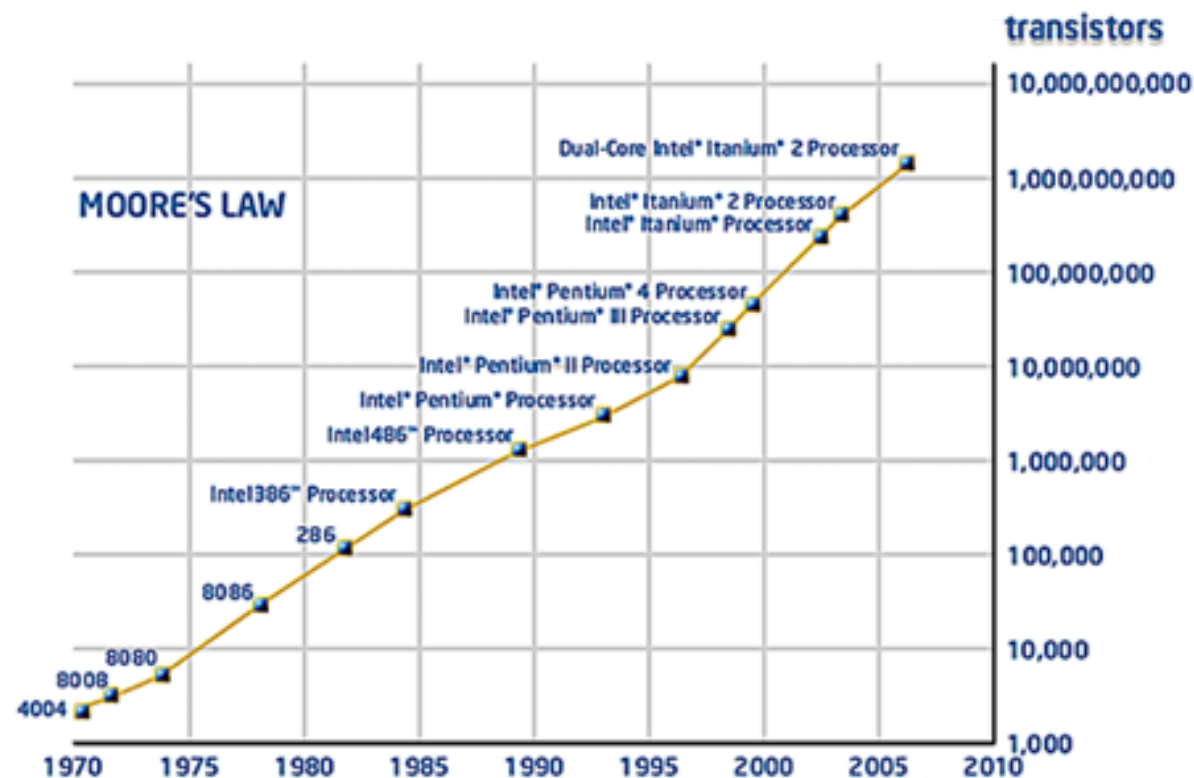
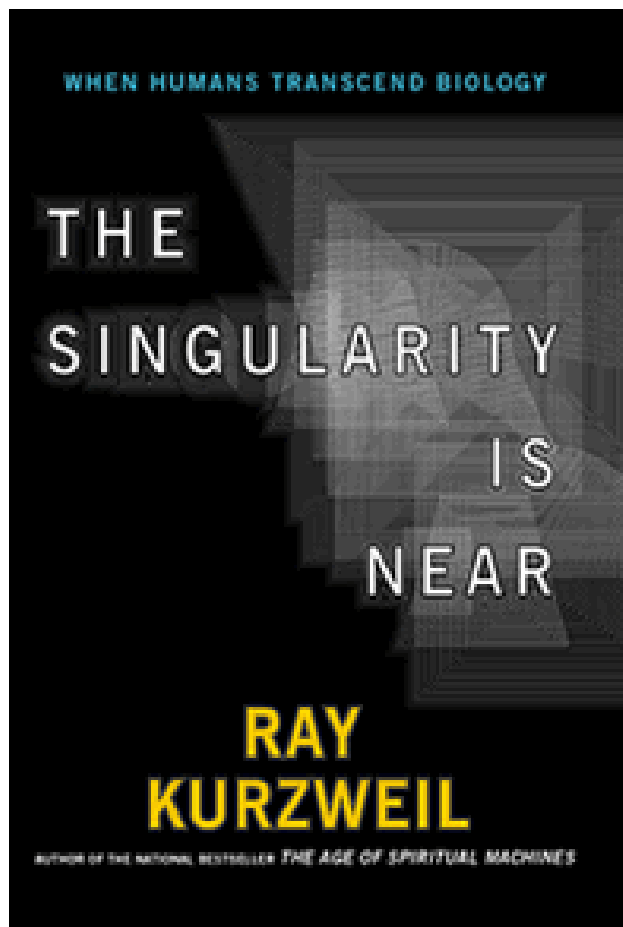
The Year Man Becomes Immortal*

BY LEV GROSSMAN

*If you believe
humans and
machines will
become one.
Welcome to
the Singularity
movement

Ray Kurzweil (MIT): *The Singularity is Near*

- www.singularity.com
- Bill Gates







2005



2014



1993



2013

WAKE UP!



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health and traits

- Clinical Reports
- Research Reports

ancestry

- Maternal Line
- Paternal Line
- Ancestry Painting
- Global Similarity

genome sharing

- Manage Sharing
- Compare Genes
- Family Inheritance

23andMe

- My Surveys (24)
- Our Research Mission
- Featured Research

community

- 23andMe Community
- Parkinson's Disease
- Pregnancy

account

health and traits

These tables list those [clinical reports](#) we consider most notable based on your genetic information.

Move your mouse over the colored bars or icons for a glance at your data. Click the name of any disease or trait for your full report.

Clinical Reports

Research Reports (86)

Show data for: [Jose Cordeiro](#)

Disease Risks ?

	Age-related Macular Degeneration
	Celiac Disease
	Psoriasis
	Type 2 Diabetes
	Prostate Cancer 
	1 locked report

[See all 10 risk reports...](#)

Carrier Status ?

Alpha-1 Antitrypsin Deficiency	Variant Absent
Bloom's Syndrome	Variant Absent
Cystic Fibrosis (Delta F508 mutation)	Variant Absent
G6PD Deficiency	Variant Absent
Glycogen Storage Disease Type 1a	Variant Absent
	1 locked report

[See all 8 carrier status...](#)

Traits ?

Alcohol Flush Reaction	Does Not Flush
Bitter Taste Perception	Can Taste
Earwax Type	Wet
Eye Color	Likely Brown
Lactose Intolerance	Likely Tolerant

Drug Response ?

Warfarin (Coumadin®) Sensitivity	Increased
Clopidogrel (Plavix®) Efficacy	Typical

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paternal line

Your Y chromosome DNA determines your paternal haplogroup. [What is a haplogroup?](#)

Map

[History](#)

[Haplogroup Tree](#)

Your paternal haplogroup may have changed. This is due to a recent update to our paternal haplogroup tree. Find out more about this feature improvement at the [Spittoon](#).

Paternal Haplogroup: R1b1b2a1a2

R1b1b2a1a2 is a subgroup of R1b1b2, which is described below.

Locations of haplogroup R1b1b2 circa 500 years ago, before the era of intercontinental travel.



R1b1b2 is the most common haplogroup in western Europe, where its branches are clustered in various national populations. R1b1b2a1a2b is characteristic of the Basque, while R1b1b2a1a2f2 reaches its peak in Ireland and R1b1b2a1a1 is most commonly found on the fringes of the North Sea.

Human Prehistory Video

Haplogroup: R1b1b2, a subgroup of

[R1b1b](#)

Age: 17,000 years

Region: Europe

Populations: Irish, Basques, British, French

Highlight: R1b1b2 is the most common haplogroup in western Europe, with distinct branches in specific regions.

Your Family and Friends

[D2a1](#)

Japanese Person

[E1b1a8a...](#)

Nigerian Person

[N](#)

Chinese Person

[R1b1b2a...](#)

Jose Cordeiro

Famous People

[C3](#)

Genghis Khan



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maternal line

Your mitochondrial DNA determines your maternal haplogroup. [What is a haplogroup?](#)

Map

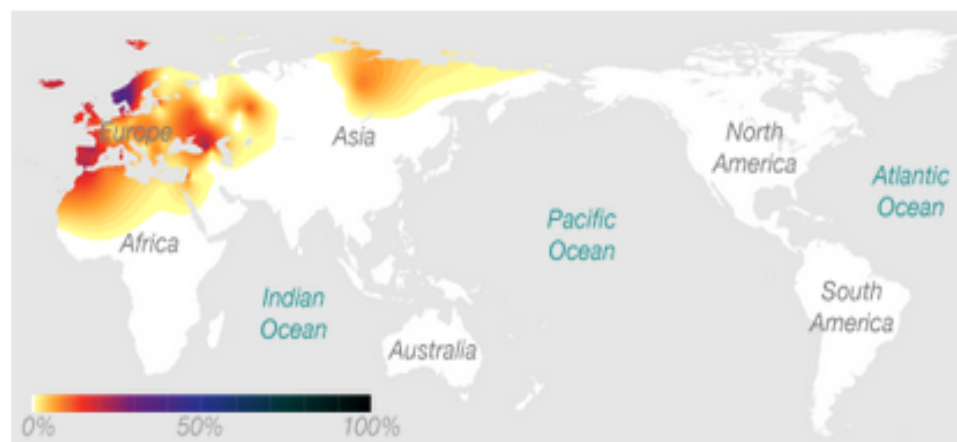
History

Haplogroup Tree

Maternal Haplogroup: H1*

H1* is a subgroup of H1, which is described below.

Locations of haplogroup H1 circa 500 years ago, before the era of intercontinental travel.



Haplogroup H1 is widespread in Europe, especially the western part of the continent. It originated about 13,000 years ago, not long after the Ice Age ended.

Human Prehistory Video



[Human Prehistory: Prologue](#)

Haplogroup: H1, a subgroup of [H](#)

Age: 13,000 years

Region: Europe, Near East, Central Asia, Northwestern Africa

Populations:

Spanish, Berbers, Lebanese

Highlight: H1 appears to have been common in Doggerland, an ancient land now flooded by the North Sea.

Your Family and Friends

[D4e2](#)

Japanese Person

[D5a2](#)

Chinese Person

[H1*](#)

Jose Cordeiro

[L3e](#)

Nigerian Person

Famous People

[H](#)

Marie Antoinette

🏠 **my home**

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family inheritance

Genome View

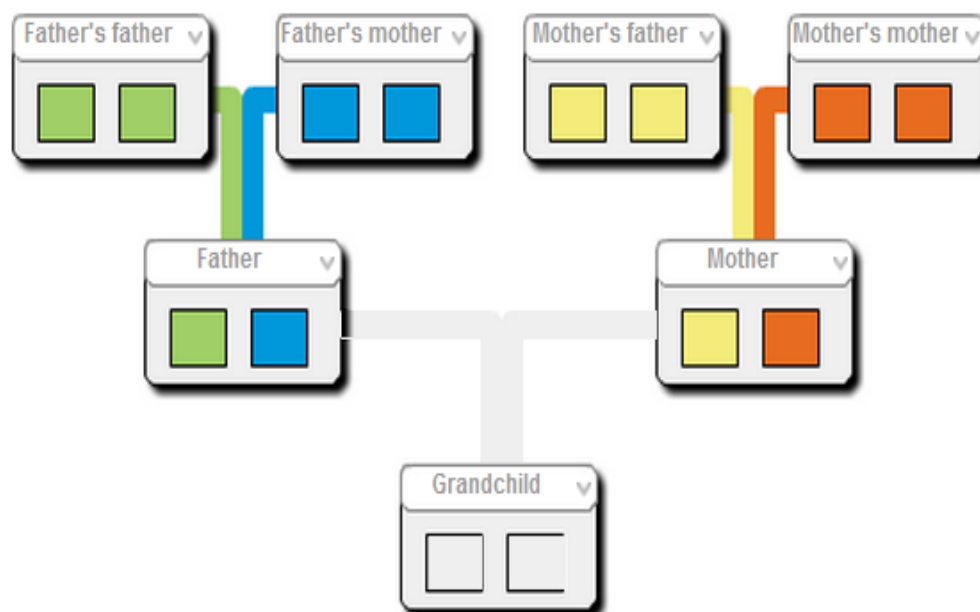
GrandTree

Inheritance Calculator

[Tell me how to use this feature...](#)

Please select a grandchild for comparison.

Click on the down-arrow labeled "Grandchild" in the bottom box of the family tree.



Click on a trait for comparison:

Genome-Wide Comparison
Comparison across all of the genome data

Bitter Tasting
Genes related to bitter tasting

Circadian Rhythm
Genes related to regulating your internal clock

Endurance
Genes related to physical endurance

Female Fertility
Genes related to fertility in women

Immune System Compatibility

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family inheritance

[Genome View](#)

[GrandTree](#)

Inheritance Calculator

Find out what traits ([phenotypes](#)) and [genotypes](#) a child might have based on the selected pair of parents.



Jose Cordeiro



Bj Price



Offspring's Possible Traits

[How are these calculated?](#)

Alcohol Flush Reaction

[View Your Alcohol Flush Reaction Report](#)

GG

GG

100%  Little or no flush (GG)

0%  Moderate flush

0%  Extreme flush

Bitter Taste Perception

[View Your Bitter Taste Perception Report](#)

GG

CG

100%  Bitter taster (GG, CG)

0%  Non-bitter taster

Earwax

[View Your Earwax Report](#)

CC

CC

100%  Wet earwax (CC)

0%  Dry earwax

Eye Color

[View Your Eye Color Report](#)

AA

AG

71%  Brown/Black eyes (AA, AG)

26%  Green/Hazel eyes (AA, AG)

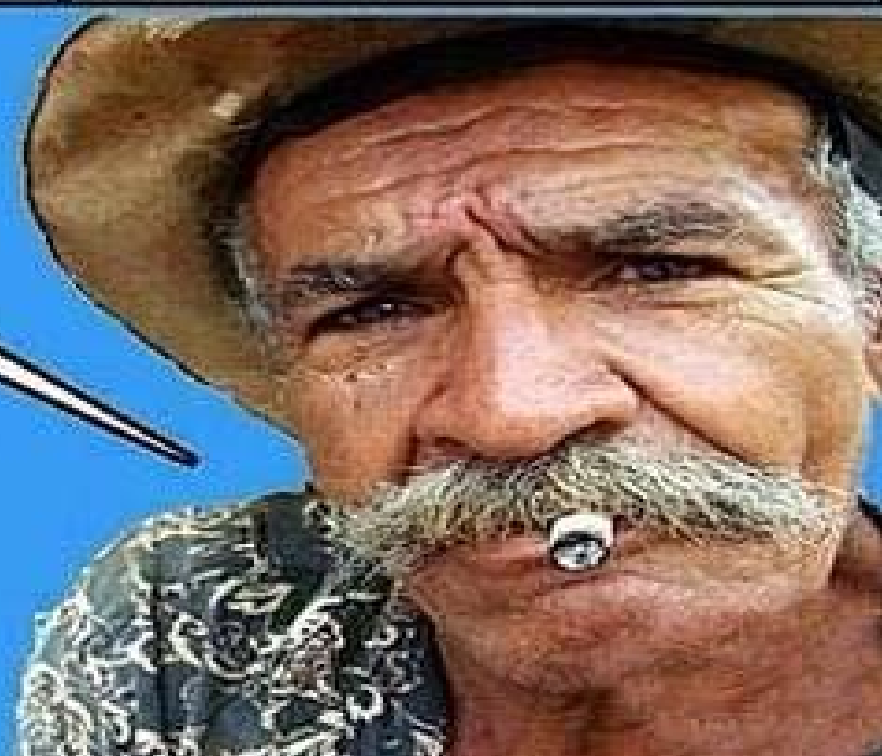
4%  Blue/Gray eyes (AA, AG)

Sequencing the genome: cost and time

Year	Cost (US\$)	Time
2003	1,000,000.000	13 years
2007	100,000,000	4 years
2008	1,000,000	2 months
2010	10,000	4 weeks
2015	1,000	5 days
2020	100	1 hour

**Agora o povo se encontra
no whatsApp, namora pelo
skype, bota chifre no facebook,
termina namoro via sms...**

**Daqui a pouco vão casar via pen drive,
fazer filho via bluetooth e os filhos vão
nascer pela impressora**



¿Qué es el futuro?

- *¡El futuro ya no es lo que era antes!*



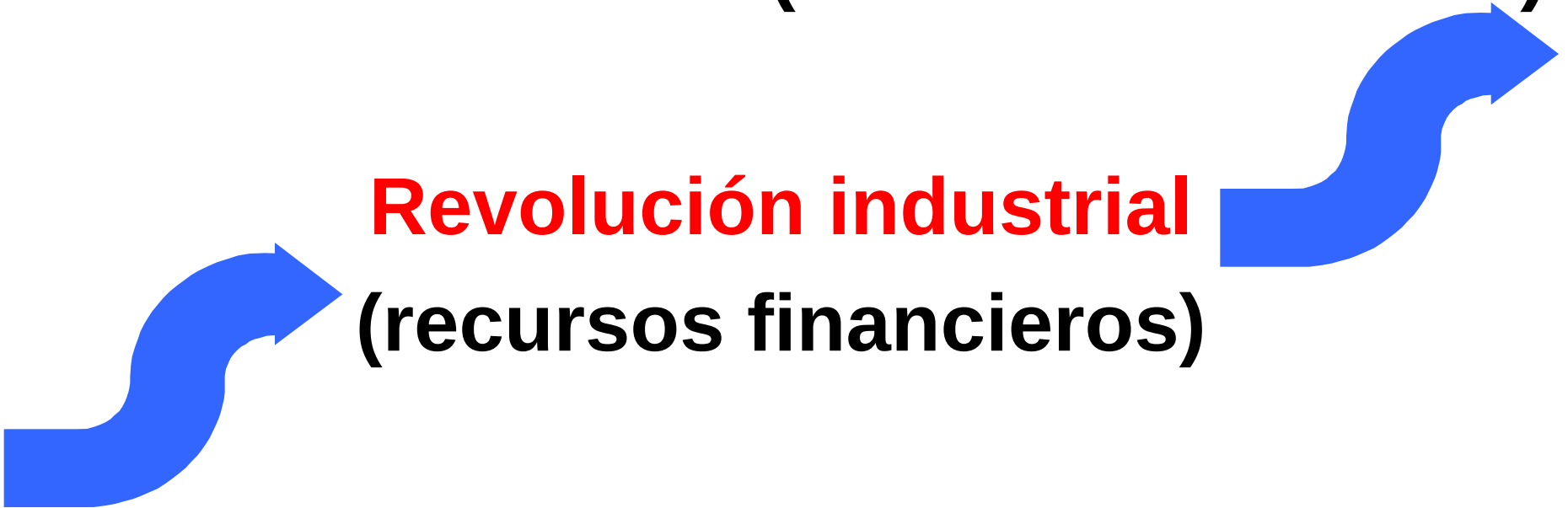
Mafalda

De la prehistoria al siglo XXI

Revolución de la inteligencia
(recursos humanos)

Revolución industrial
(recursos financieros)

Revolución agrícola
(recursos naturales)



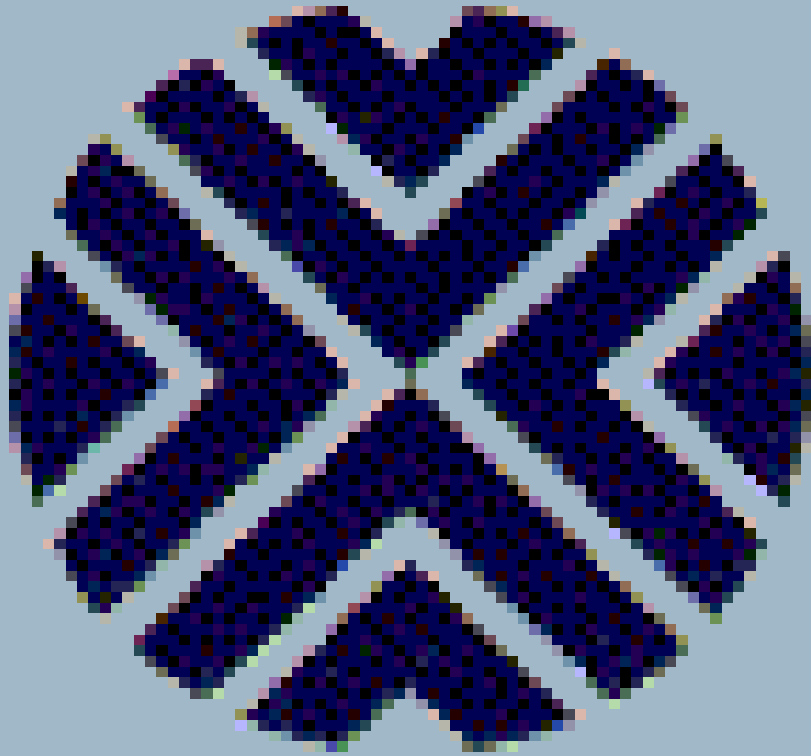


- **Mindfacturing**

- **Manufacturing**

- **Footfacturing**

From manufacturing to **mindfacturing**



PDVSA



We need to **add value**



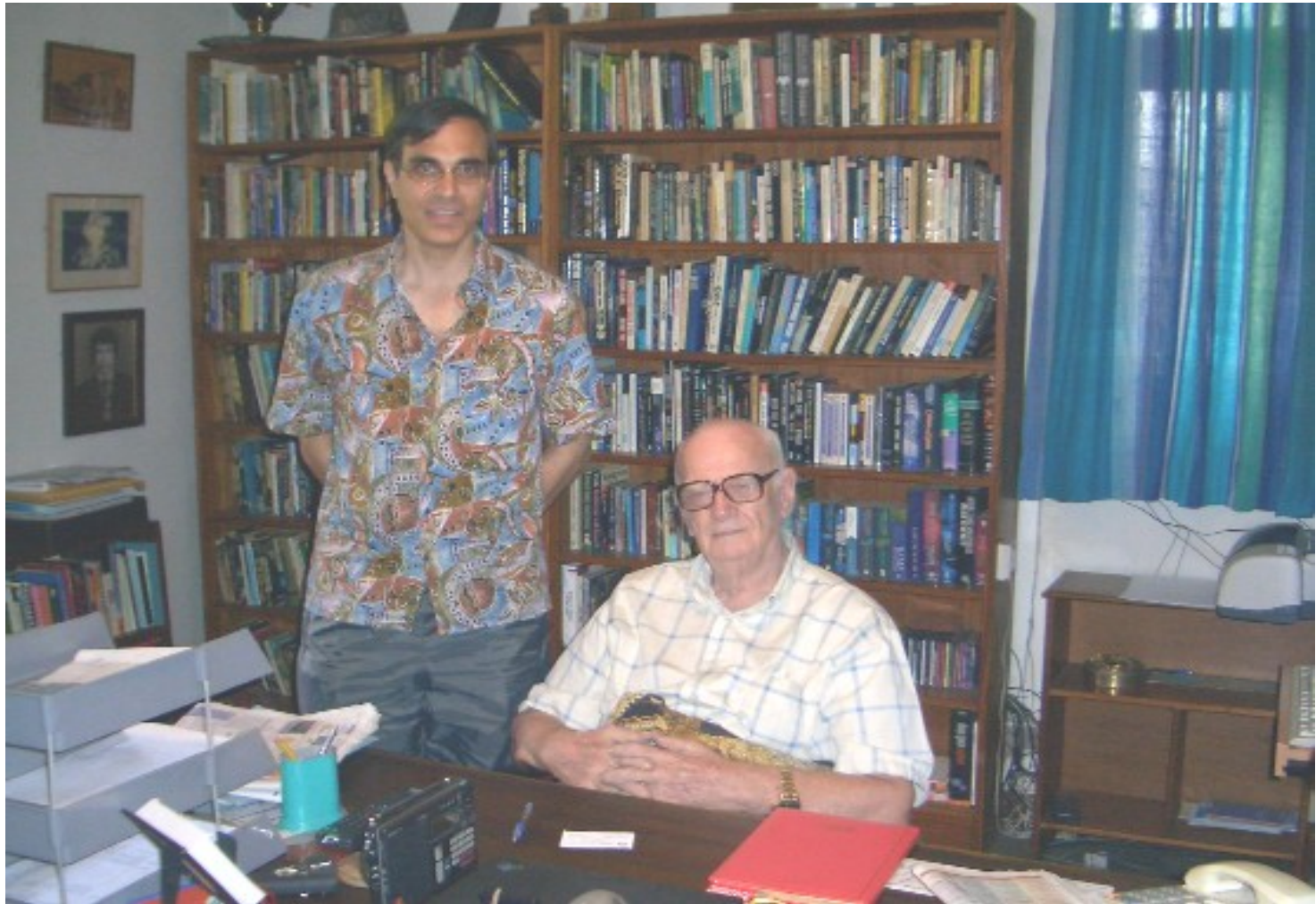
Attitudes towards the future



- Passive (**ostrich**) Suffer the future
- Reactive (**fire fighter**) Respond
- Preactive (**insurer**) Prepare
- Proactive (**builder**) Create



Sir Arthur C. Clarke with Jose Cordeiro



The Three Laws of **Sir Arthur C. Clarke**

- **First Law:** When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.
- **Second Law:** The only way of discovering the limits of the possible is to venture a little way past them into the impossible.
- **Third Law:** Any sufficiently advanced technology is indistinguishable from magic.

Technologies of the “past”

- 30 years ago

Personal computers

- 20 years ago

Cell phones

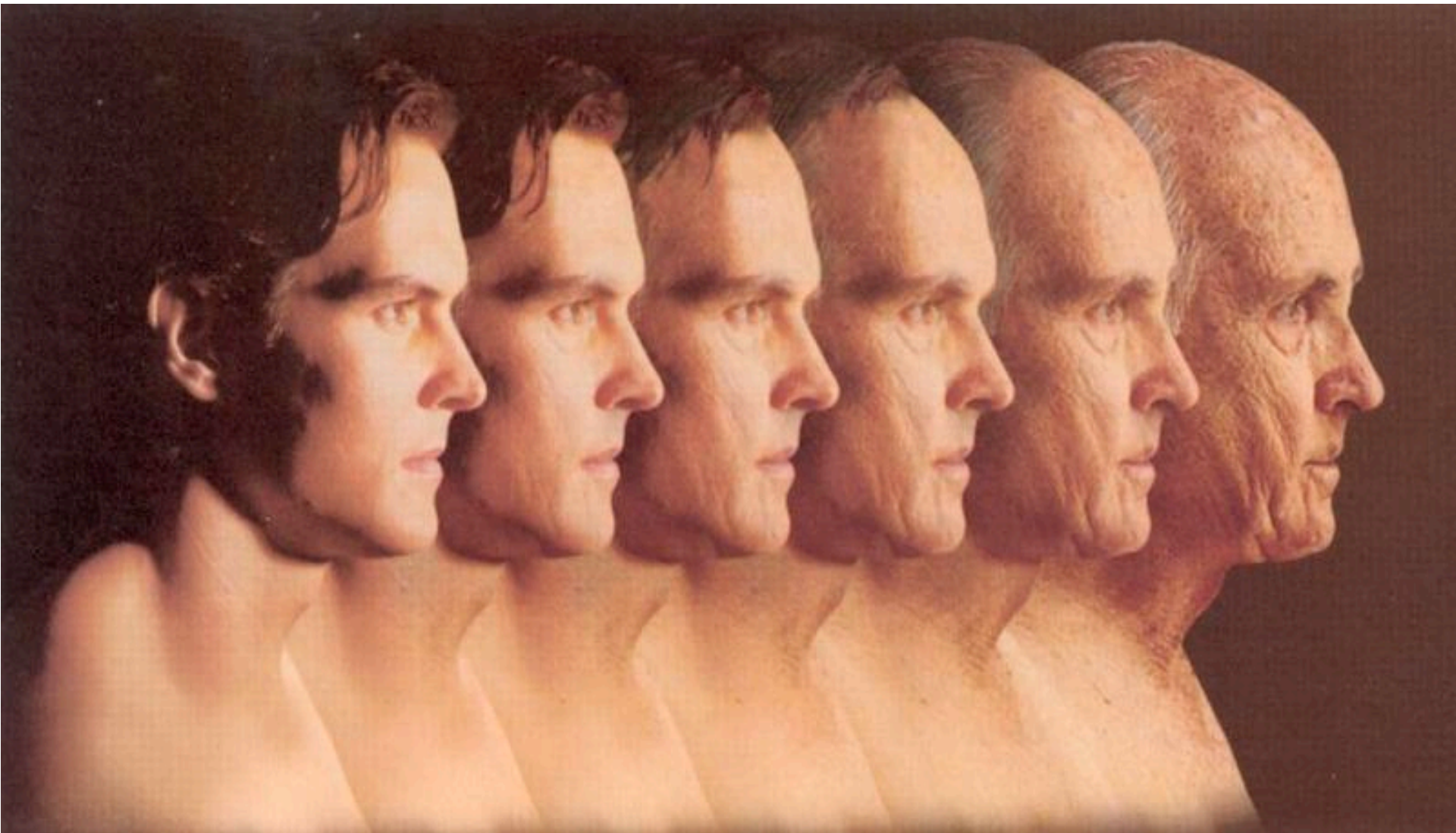
- 10 years ago

Google

- What will happen in 10 years? In 20 years? In 30 years?

Immortal (ageless) cells!

Aging as a **disease**? And **curable**?



[My Bridge 4 Life™](#)[NewOrgan Prize](#)[Mprize](#)

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- [– History of Science Prizes](#)
- [– Current Competitions](#)
- [– Meet the Competitors](#)
- [– Latest Mprize Winners](#)
- [– How to Compete](#)
- [– Scientific Advisory Board](#)

[Investing in the Future](#)

The Mprize, introduced in 2003, is designed to directly accelerate the development of revolutionary new life extension therapies. The prize pot continues to grow through donations; awards are made whenever a research team extends the life of mice. There are two categories of cash prizes:

- **Longevity** - to the research team that breaks the world record for the oldest-ever mouse
- **Rejuvenation** - to the team that develops the most successful late-onset rejuvenation that extends the life of the mice

The prize makes it possible to attract scientists from major universities [Andrzej Bartke](#), Southern Illinois University, who headed the team that holds the world record for longevity and [Dr. Stephen Spindler](#), University of California, the prize holder for rejuvenation. In 2009 the first Special Mprize Achievement Award went to [Dr. Z. David Sharp](#) for the successful healthy life extension of already aged mice using a pharmaceutical rapamycin.

[Meet the Competitors](#)[Competition Rules and Application](#)

[Scientific Advisory Board](#): Meet the prize scientists who share our vision and enhance our ability to change the future of aging.

Life extension results: **today, now!**



x 3 times



x 4 times



x 6 times

TIME

CAN
Google
SOLVE
DEATH?

The search giant is launching a venture
to extend the human life span.

That would be crazy—if it weren't Google

By Harry McCracken and Lev Grossman

**¿EXISTE LA FÓRMULA DE LA ETERNA JUVENTUD?
¿ES POSIBLE UN MUNDO SIN MUERTE?**

**Sábado
4 de mayo**

VEN A CONOCER LA NUEVA PRODUCCIÓN ORIGINAL DE HISTORY

VIDA ETERNA

**CONFERENCIA DE PRENSA
MARTES, 30 DE ABRIL - 10:00AM**

**W HOTEL MEXICO CITY
CAMPOS ELISEOS 252/POLANCO/MÉXICO, D.F. 11560**

RSVP: edgar@difusionenmedios.com

tuhistory.com





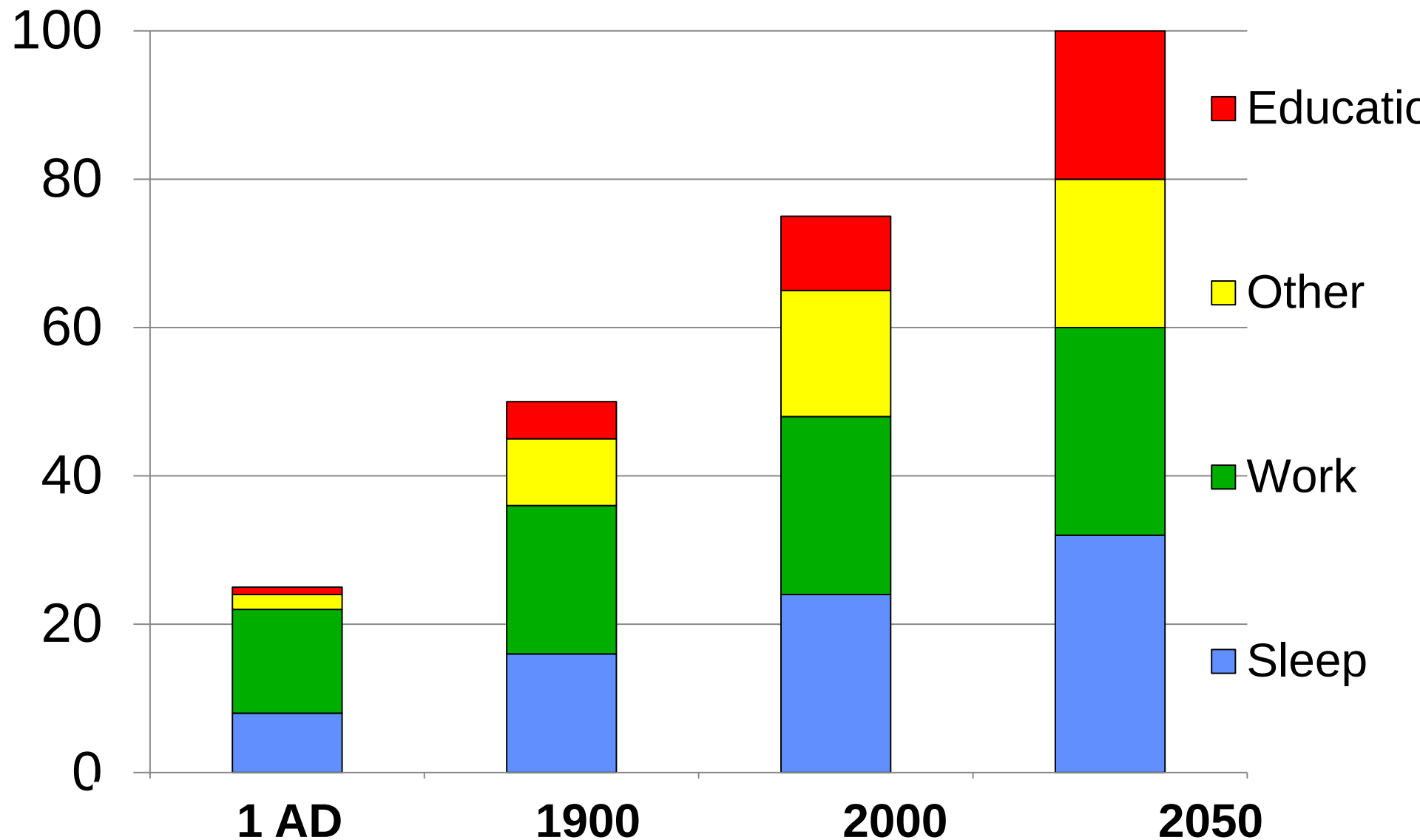
O fim chegou ao fim: *a ciência revela a* *Imortalidade*



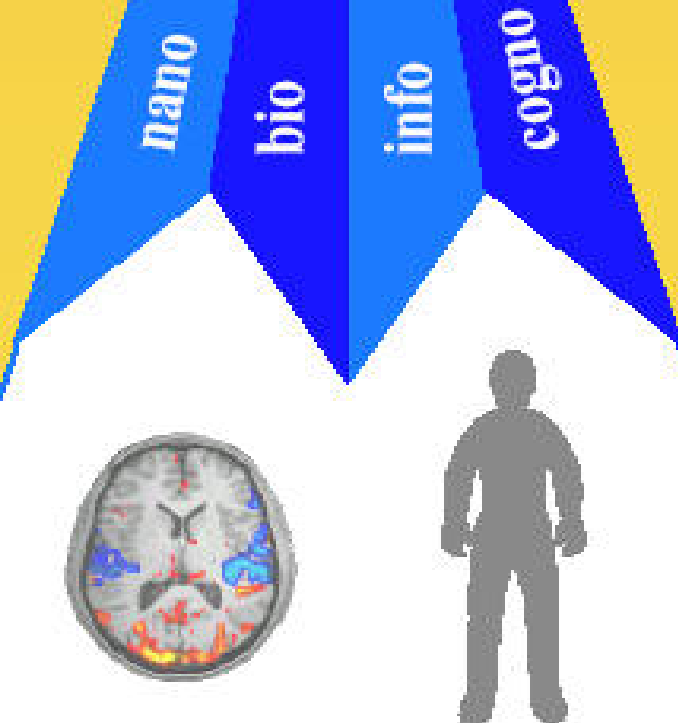
com
Dr. José Luis Cordeiro

Quinta | 10 de Abril | 20h00

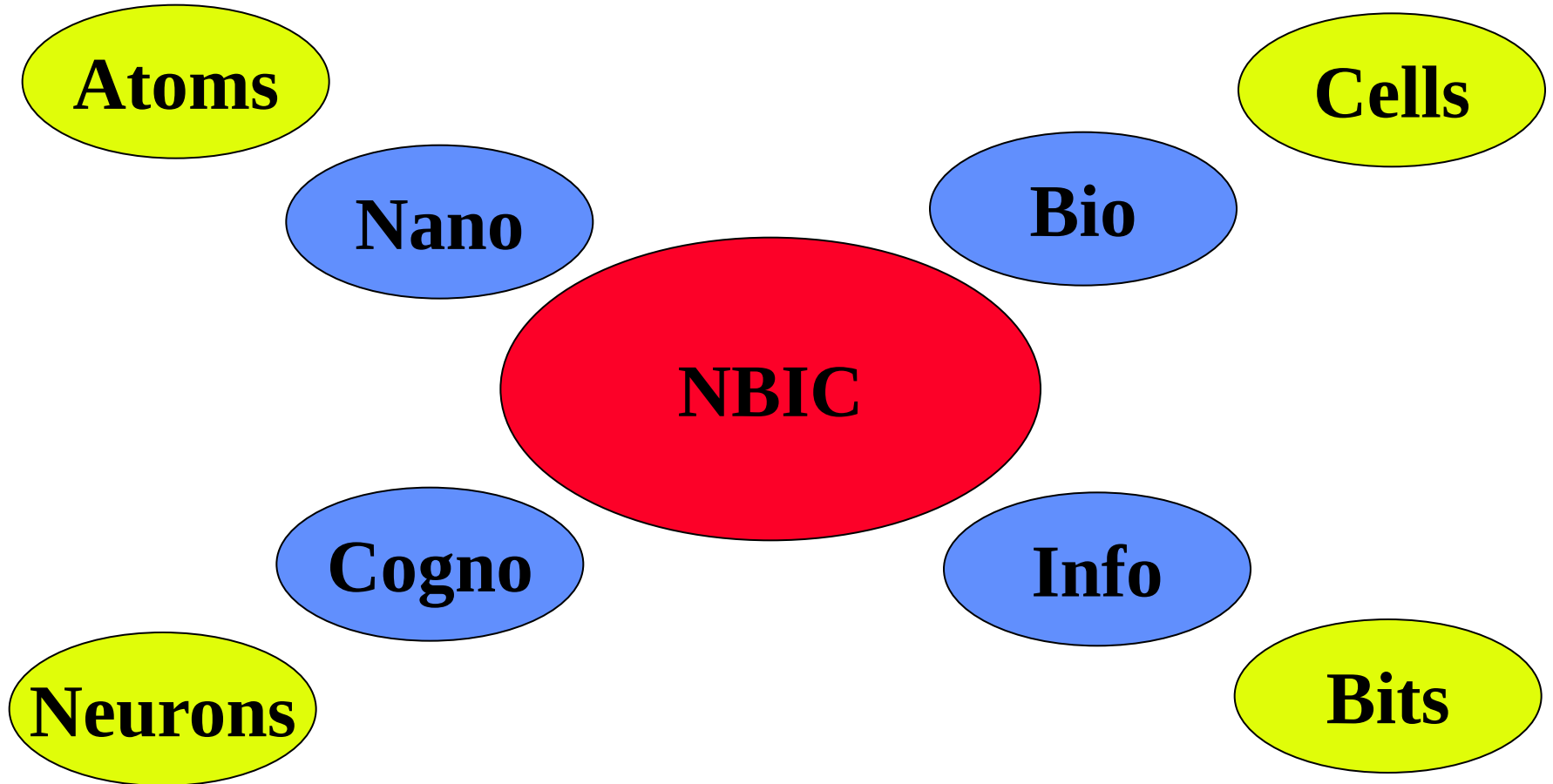
Time, Lifespan and Education



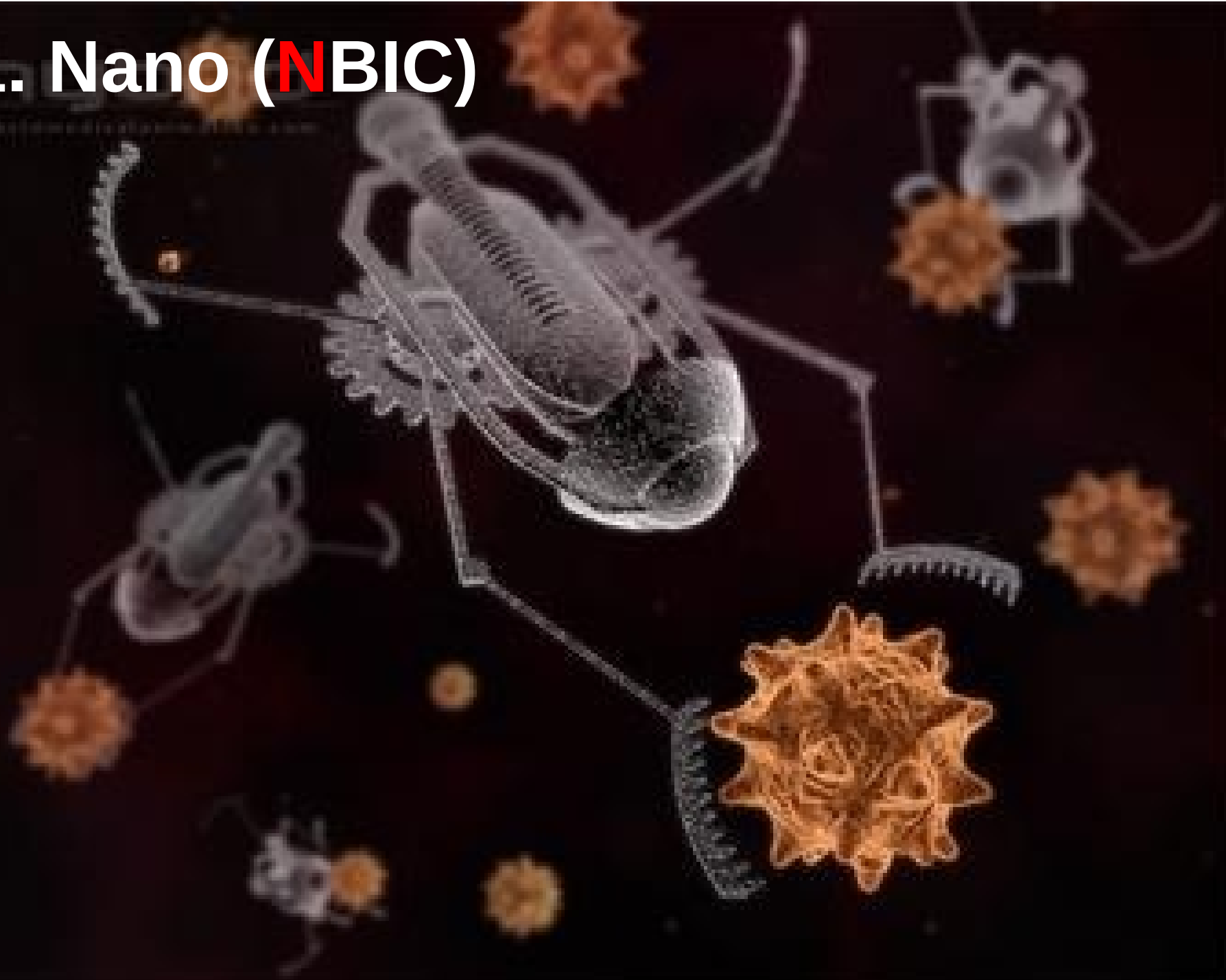
NBIC (Nano-Bio-Info-Cogno) National Science Foundation Department of Commerce



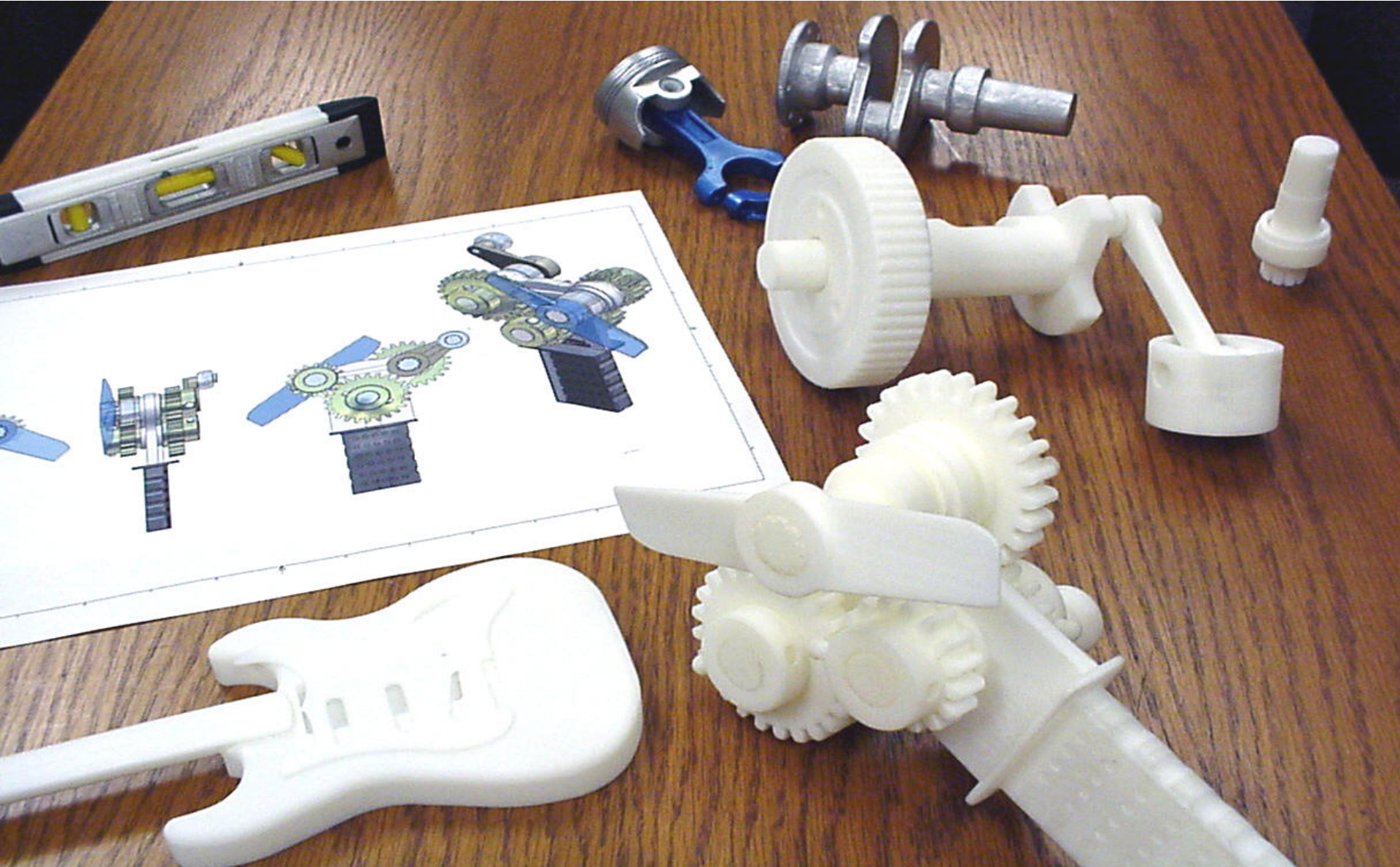
Technological Convergence NBIC



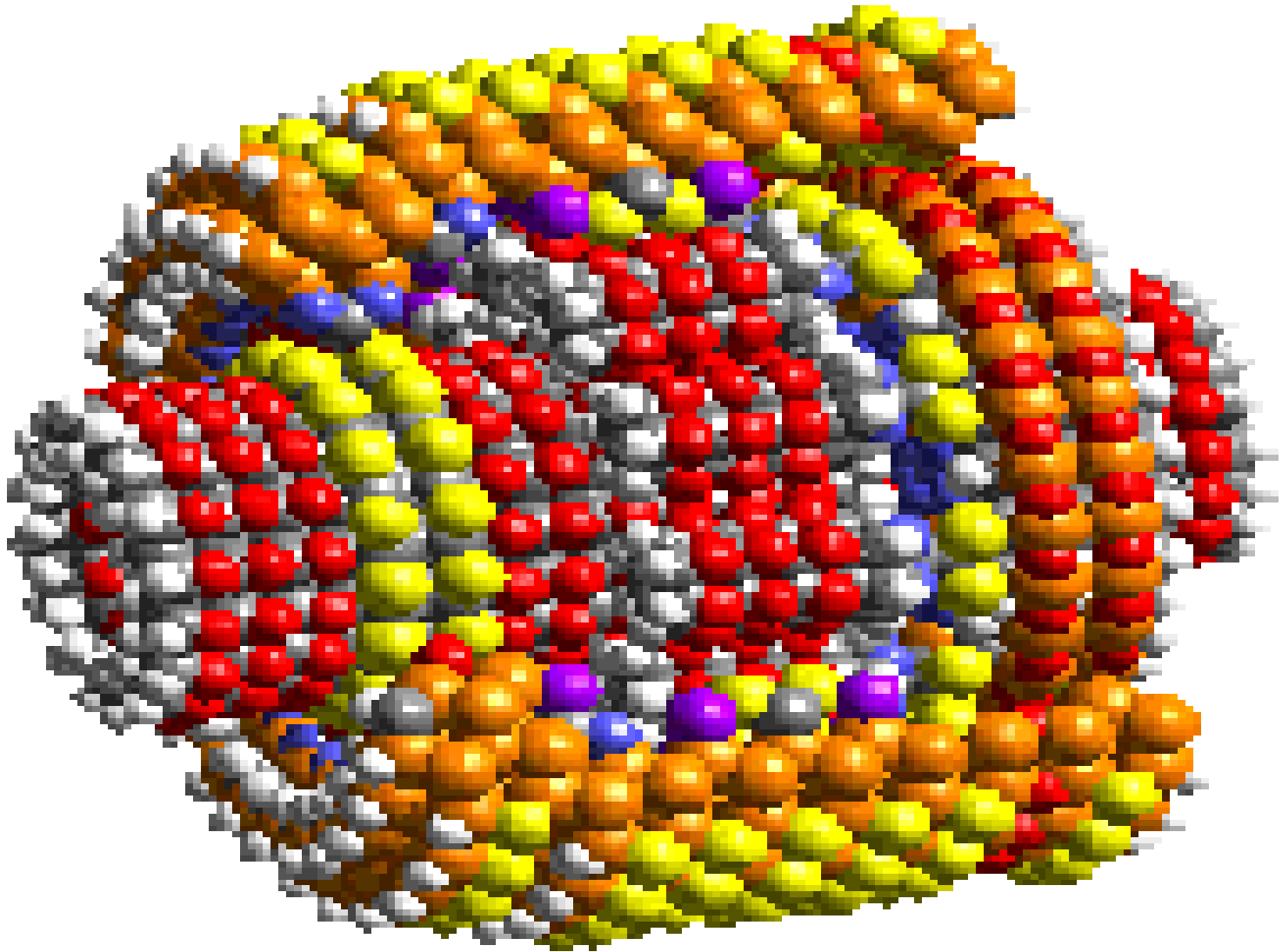
1. Nano (NBIC)



3D Printing in NASA: **Made in Space**

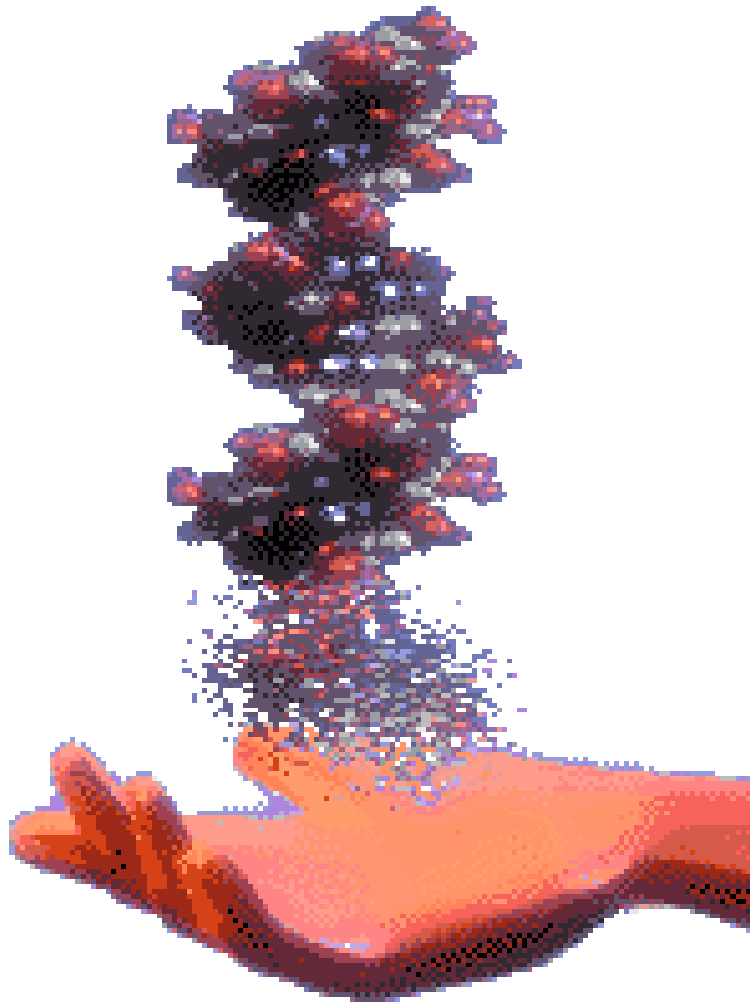


Nanotechnology: www.nano.gov





2. Bio (NBIC)

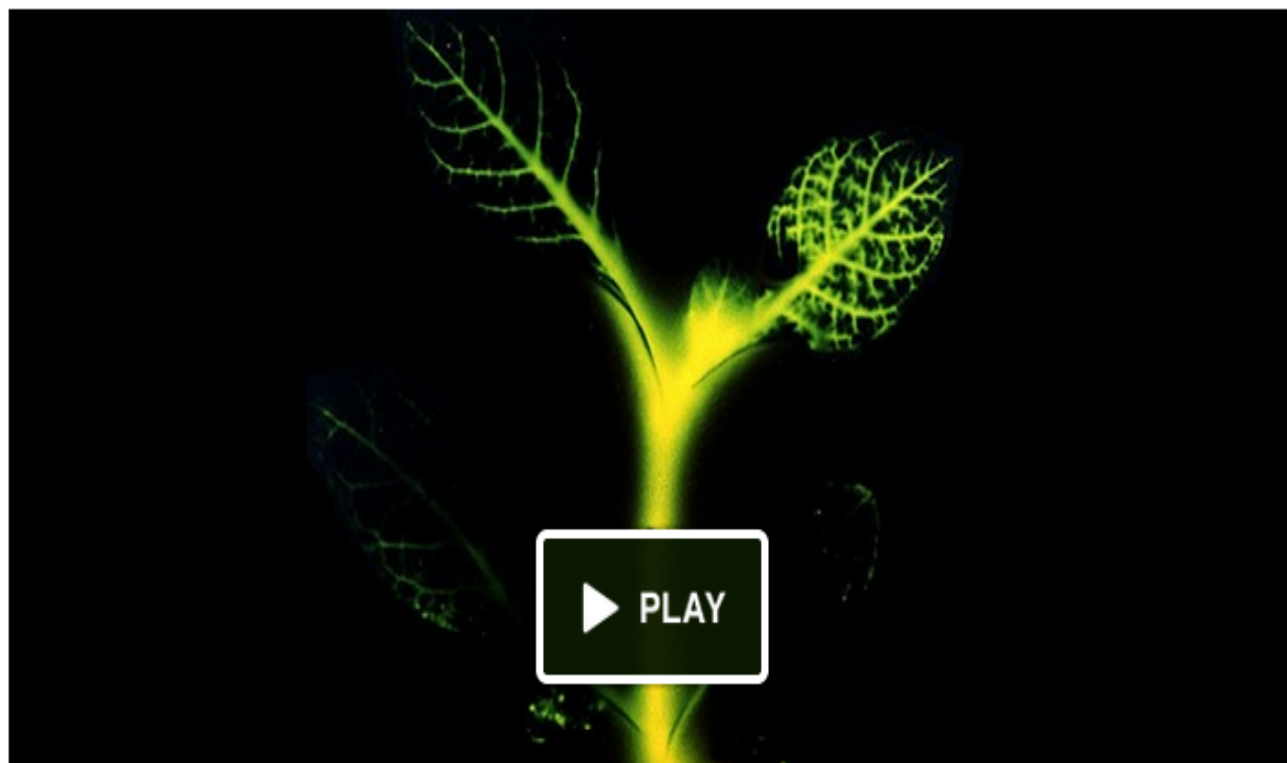


The **glo**-fish: transgenic fish (Taiwan)



Glowing Plants: Natural Lighting with no Electricity

by Antony Evans

[Home](#)[Updates](#) 12[Backers](#) 5,759[Comments](#) 443[San Francisco, CA](#)[Technology](#)

5,759

backers

\$324,686

pledged of \$65,000 goal

25

days to go

[Back This Project](#)

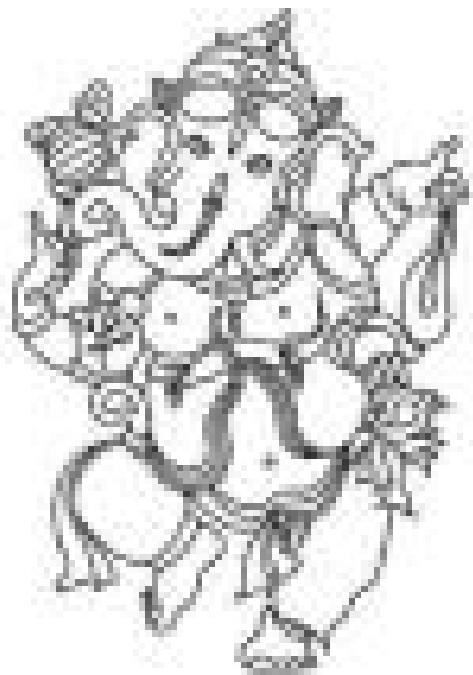
\$1 minimum pledge

De-extinction



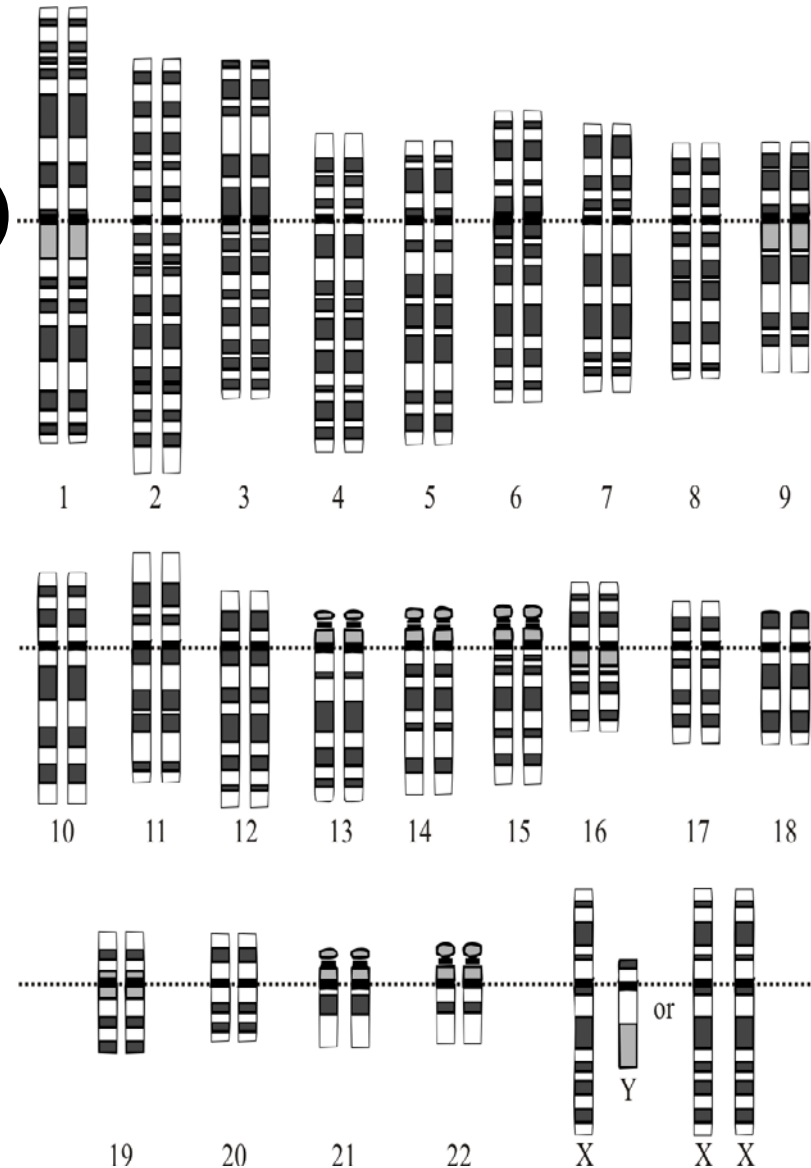
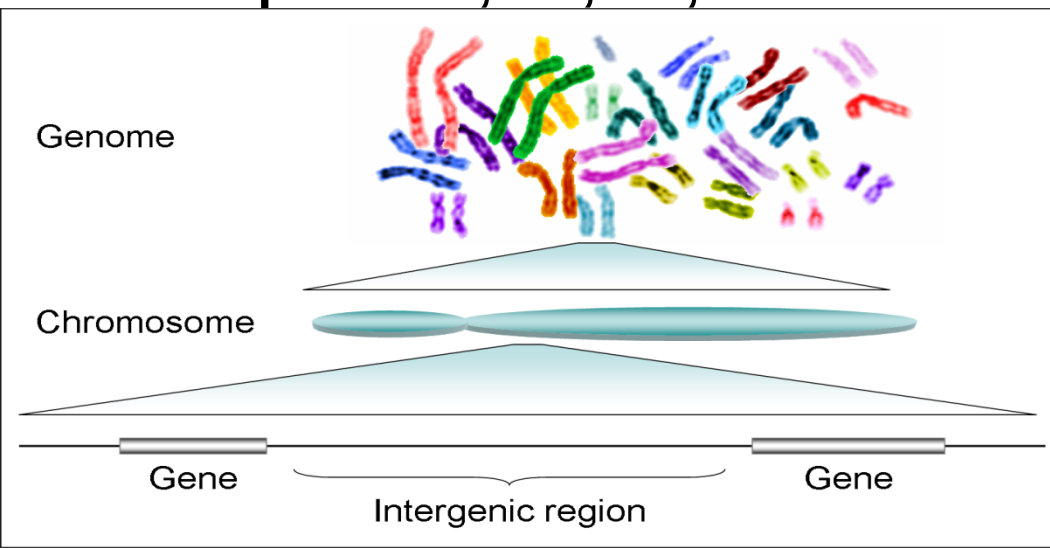
Dolly: the clone





Synthetic biology is born

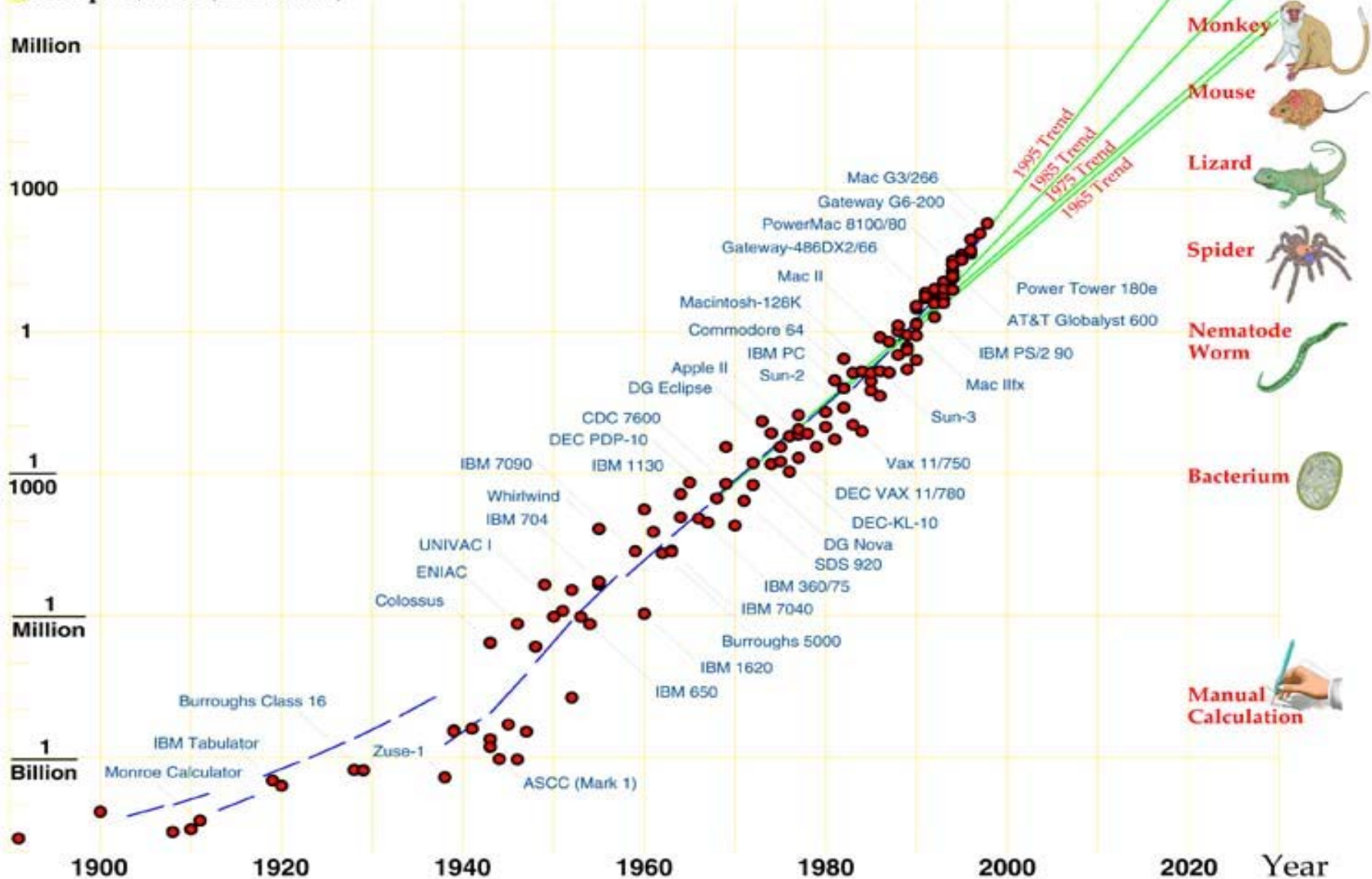
- **Variola virus (smallpox)**
Genes: 197
Base pairs: 185,000
- **Mycoplasma genitalium (bacteria)**
Genes: 485
Base pairs: 580,000
- **Homo sapiens sapiens**
Genes: ~25,000
Base pairs: ~3,000,000,000



3. Info (NBIC)

Evolution of Computer Power/Cost

MIPS per \$1000 (1998 Dollars)



MIT Media Lab: \$100 laptop





1G
1981



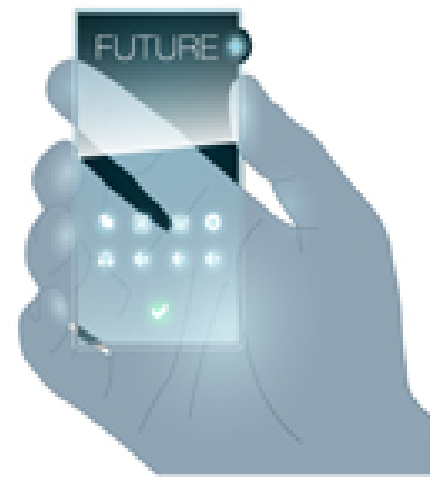
2G
1992



3G
2001



4G
2011

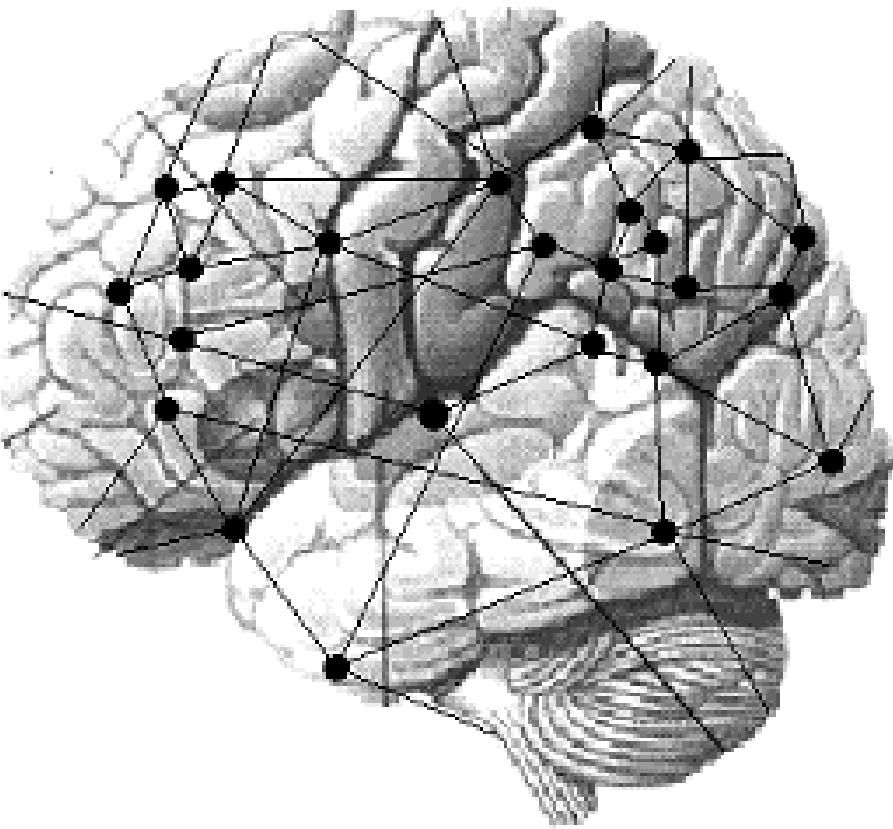


5G
2020

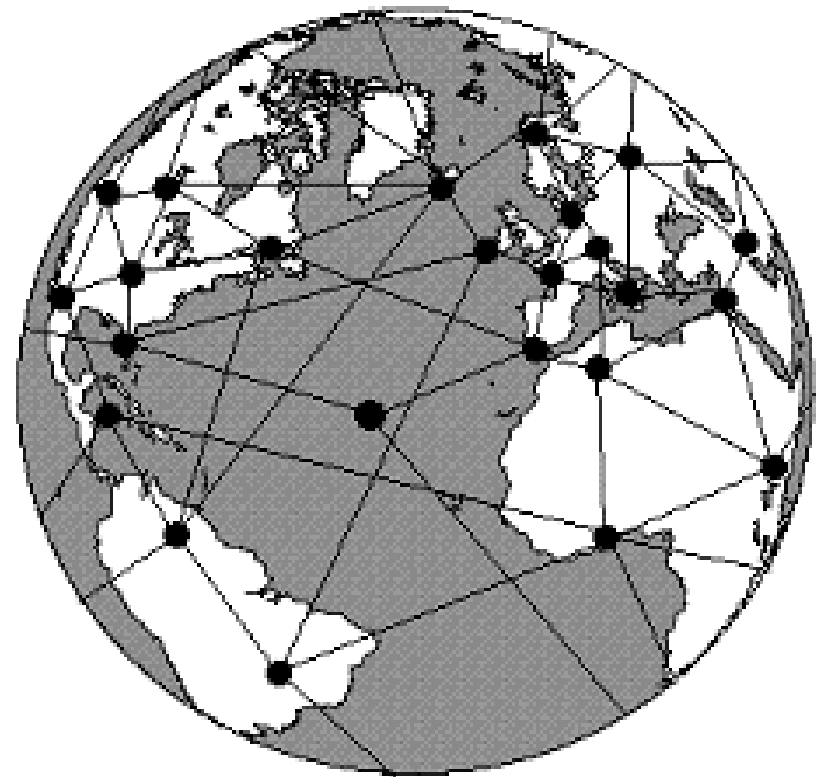
More
Bandwidth...



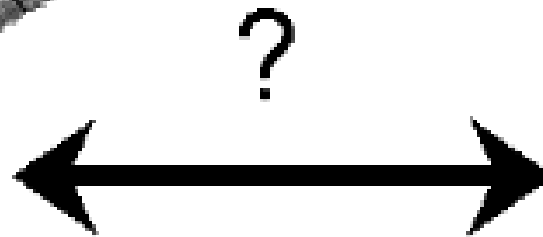
Global brain?



Human Brain



Global Network





EDITION: **INTERNATIONAL** | U.S. | MÉXICO | ARABIC

TV: CNNi | CNN en Español

Set edition preference



[Home](#) [Video](#) [World](#) [U.S.](#) [Africa](#) [Asia](#) [Europe](#) [Latin America](#) [Middle East](#) [Business](#) [World Sport](#) [Entertainment](#) [Tech](#)

IMPACT BY **WORLD**



MAKE A
DIFFERENCE
NOW



Google boss: Entire world will be online by 2020



By **Doug Gross**, CNN

April 15, 2013 – Updated 1720 GMT (0120 HKT) | Filed under: [Web](#)

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Recommend 1.4k



MANAN VATS/WARN/AFP/GETTY IMAGES

Zuckerberg Explains Facebook's Plan to Get Entire Planet Online

BY STEVEN LEVY 08.26.13 1:00 PM

 Follow @stevenlevy

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 Share 136



OUTERNET



INFORMATION FOR THE WORLD FROM OUTER SPACE

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For free.

IBM's **Watson** won in Jeopardy!

February 14-16, 2011



May 11th, 1997

Computer won world champion of chess

(Deep Blue)

(Garry Kasparov)



Fritz (Computer)

Number of games in database: **231**

Years covered: **1991 to 2006**

Overall record: **+67 -73 =49 (48.4%)***

* Overall winning percentage = (wins+draws/2) / total games

Based on games in the database; may be incomplete.

42 exhibition games, odds games, etc. are excluded from this statistic.

MOST PLAYED OPENINGS

With the White pieces:

Sicilian (14)

B80 B30 B64 B22 B90

Caro-Kann (12)

B10 B14 B18 B12 B17

Queen's Pawn Game (10)

A40 A45 D02

King's Indian (10)

E76 E62 E97 E81 E82

French Defense (9)

C01 C03 C05 C07 C16

Ruy Lopez (6)

C67 C92 C70 C65

With the Black pieces:

Sicilian (18)

B90 B21 B33 B20 B81

Uncommon Opening (12)

A00 B00

Queen's Pawn Game (10)

D00 A45 D05 A46

Bird's Opening (9)

A02 A03

King's Indian Attack (8)

A07 A08

Queen's Indian (6)

E12 E19

REPERTOIRE EXPLORER



**With the
White Pieces**



**With the
Black Pieces**



NOTABLE GAMES: [\[what is this?\]](#)

Anand vs Fritz, 2000 0-1

Fritz vs Kasparov, 1992 1/2-1/2



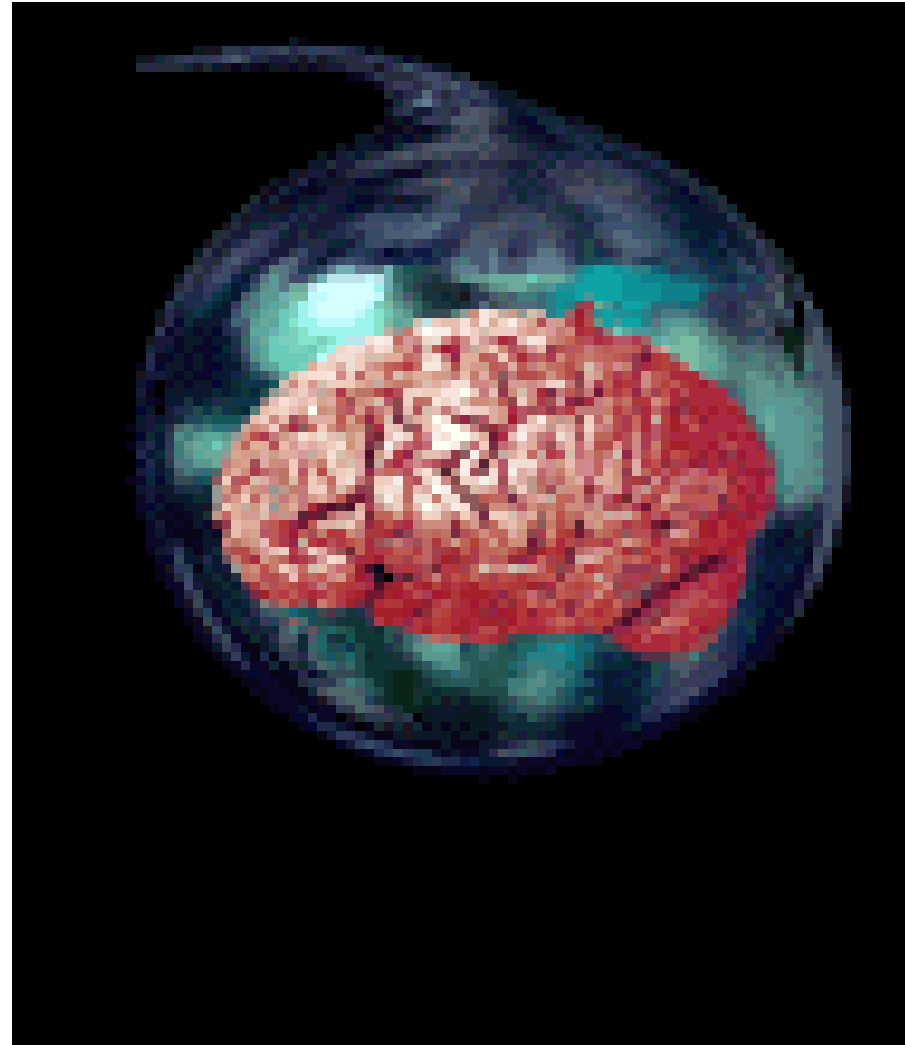
Google™

self-driving car

Google Glass



4. Cogno (NBIC)



Riken Brain Institute

www.brain.riken.go.jp



Riken Brain Institute

www.brain.riken.go.jp

1997



2003



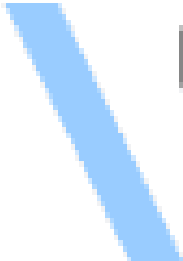
2008



2013

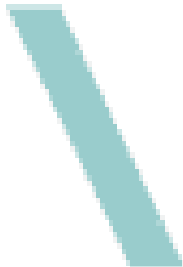


2018



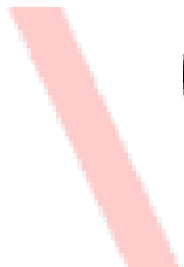
Understanding the Brain

Elucidation of brain functions



Protecting the Brain

Elimination of brain disorders



Creating the Brain

Development of brain-style computers

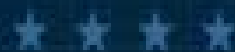


HBP

The Human Brain Project



the WHITE HOUSE



PRESIDENT OBAMA IS CALLING ON THE SCIENCE COMMUNITY
TO JOIN HIM IN PURSUING A GRAND CHALLENGE

BRAIN INITIATIVE

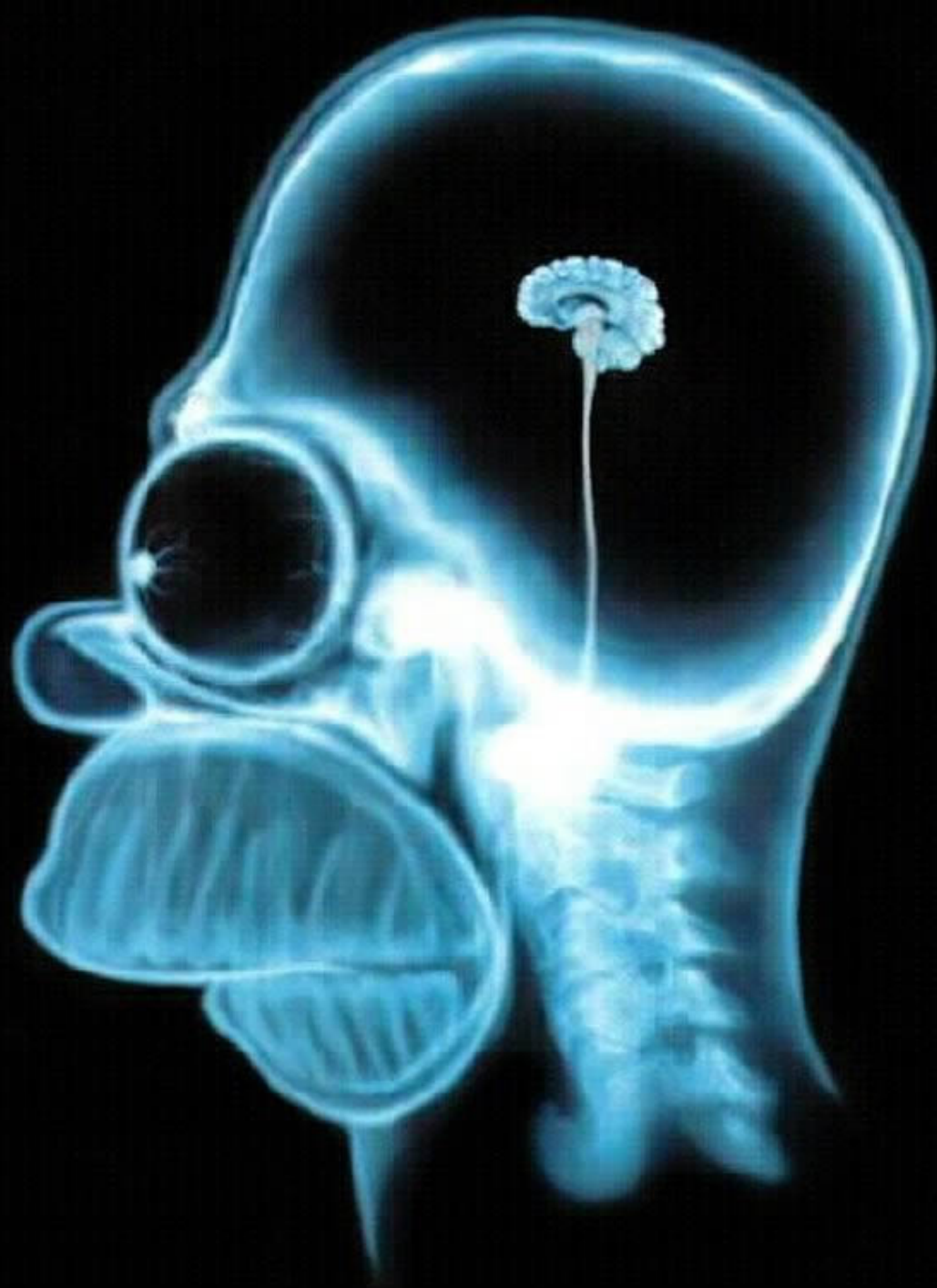
BRAIN RESEARCH
THROUGH ADVANCING
INNOVATIVE
NEUROTECHNOLOGIES



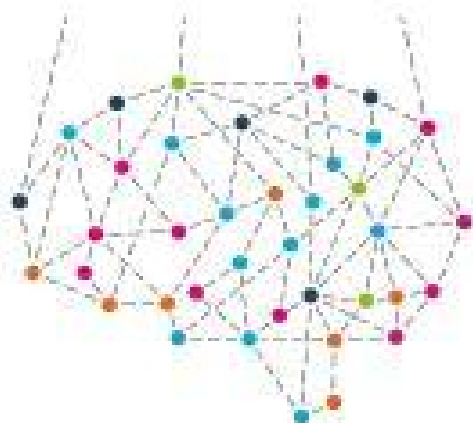
What is a **brain**?



- 1 brain
- 10^{11} neurones
- 10^{14} synapsis
- 10^{17} computations
(per second)
- And the mind?
- And the spirit?
- And the soul?



HOW TO
CREATE
A
MIND
THE SECRET OF
HUMAN THOUGHT REVEALED



RAY KURZWEIL

AUTHOR OF THE NEW YORK TIMES BESTSELLING
THE SINGULARITY IS NEAR

Ray Kurzweil

Cómo crear una mente

El secreto del pensamiento humano

lola
books

HOME

THE
BOOKBUY
BOOK

HOW TO
**CREATE
A
MIND**
THE SECRET OF
HUMAN THOUGHT REVEALED



RAY KURZWEIL

AUTHOR OF THE NEW YORK TIMES BESTSELLER
THE SINGULARITY IS NEAR

“It is rare to find a book that offers unique and inspiring content on every page. *How to Create a Mind* achieves that and more. Ray has a way of tackling seemingly overwhelming challenges with an army of reason, in the end convincing the reader that it is within our reach to create nonbiological intelligence that will soar past our own. This is a visionary work that is also accessible and entertaining.”

—RAFAEL REIF,

President of MIT, MIT Maseeh Professor of Emerging Technology, former MIT Provost, former department head of the Department of Electrical Engineering and Computer Science (EECS), MIT's largest academic department.



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YOU ARE WHAT



Como crear una mente
(www.LolaBooks.com)



Ray Kurzweil
(www.KurzweilAI.net)



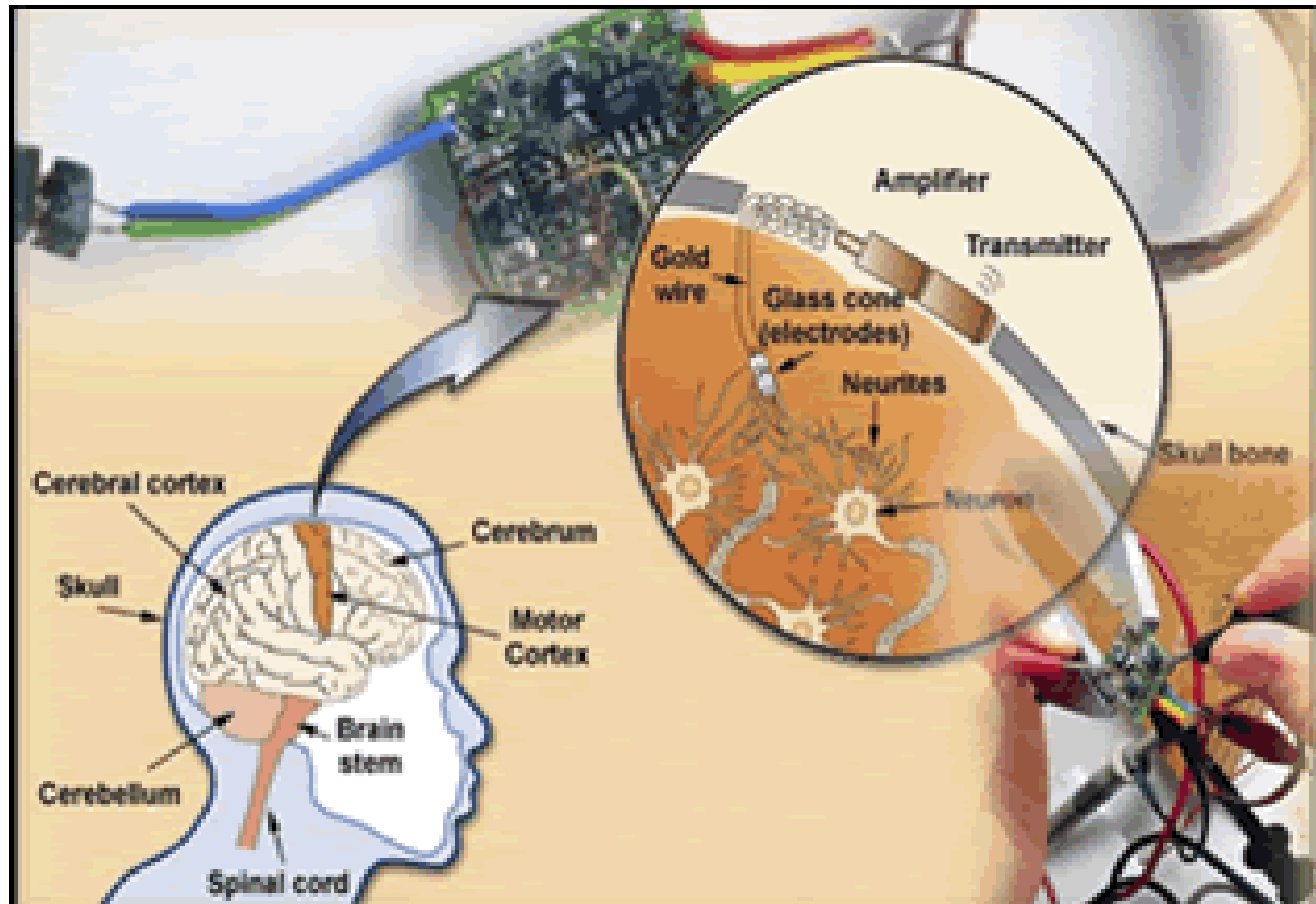
José Luis Cordeiro
(www.Cordeiro.org)



Prólogo para la edición española del libro
Como crear una mente
de Ray Kurzweil (por José Luis Cordeiro)



Internal brain implants: **Cyberkinetics Inc.**



images courtesy Georgia Tech

External brain implants



mindwave

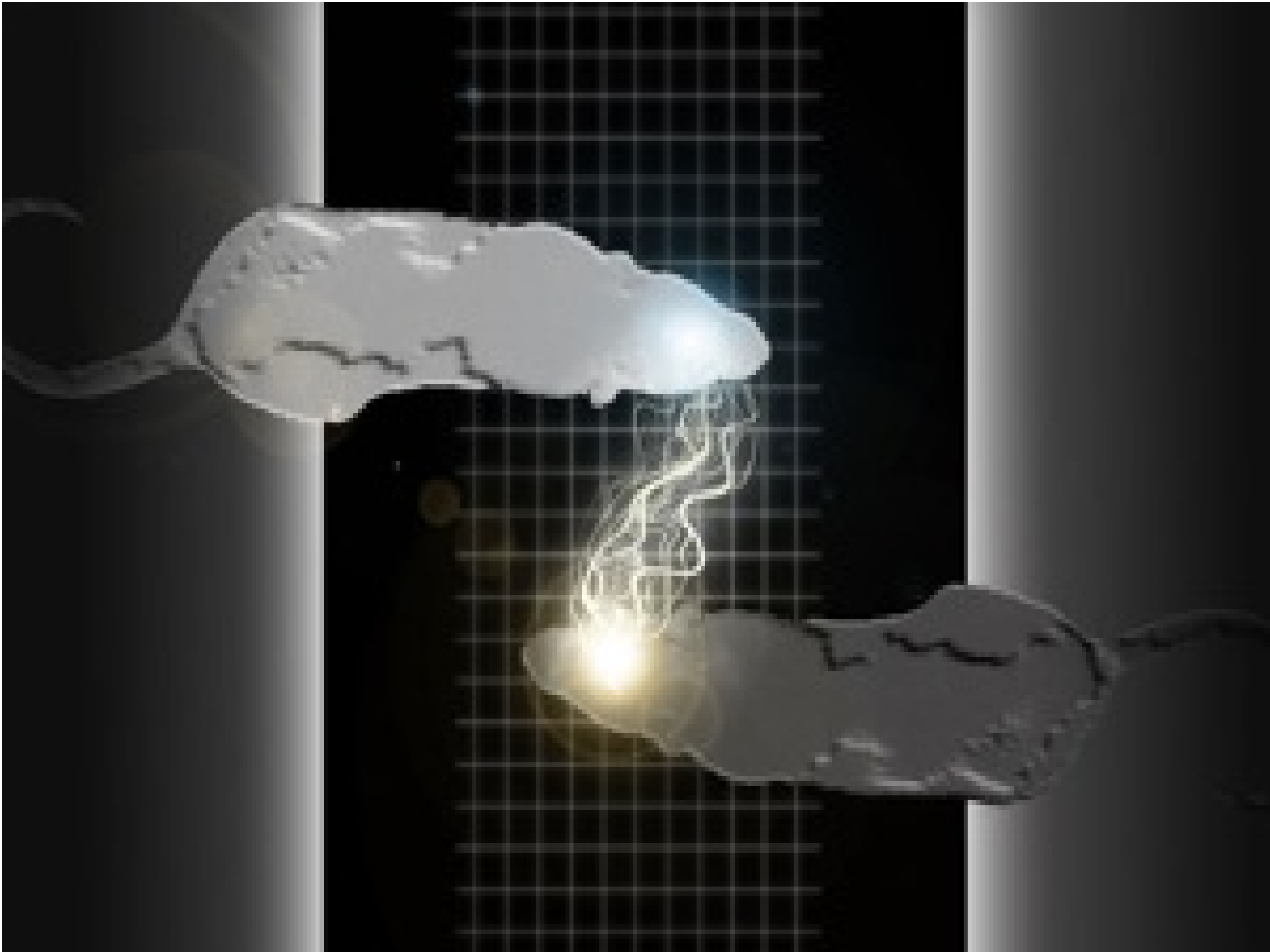
Decades of Laboratory EEG
Technology Research
for under \$100



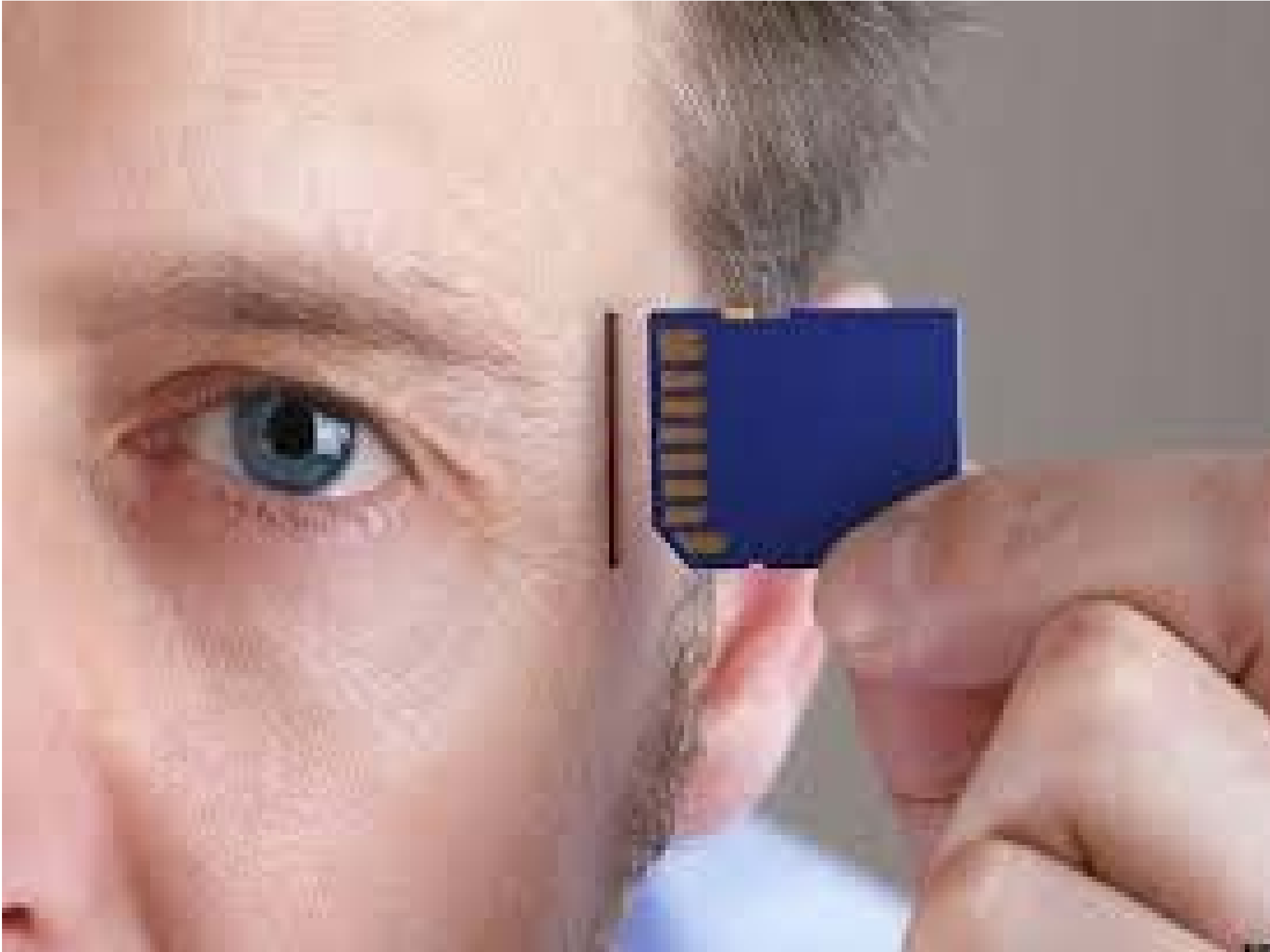
emotive

you think, therefore, you can









Robots in Japan and Korea



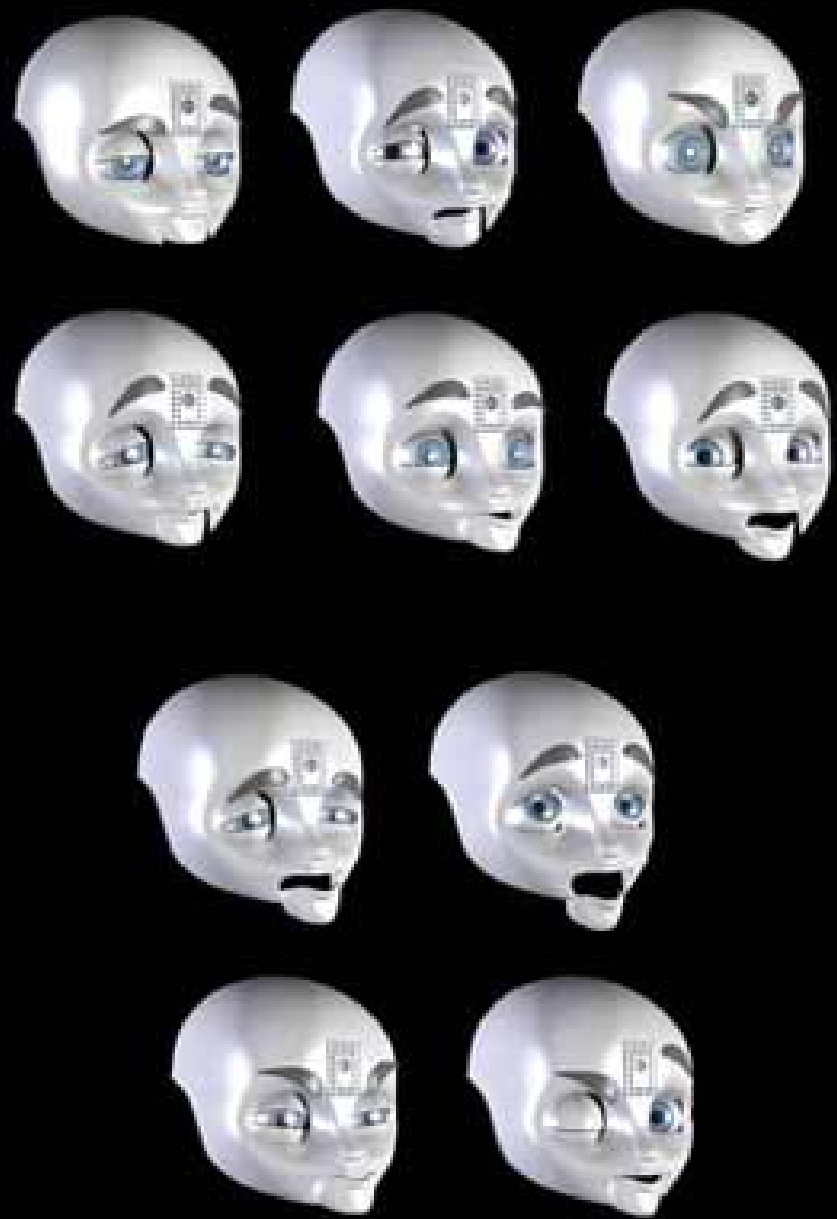
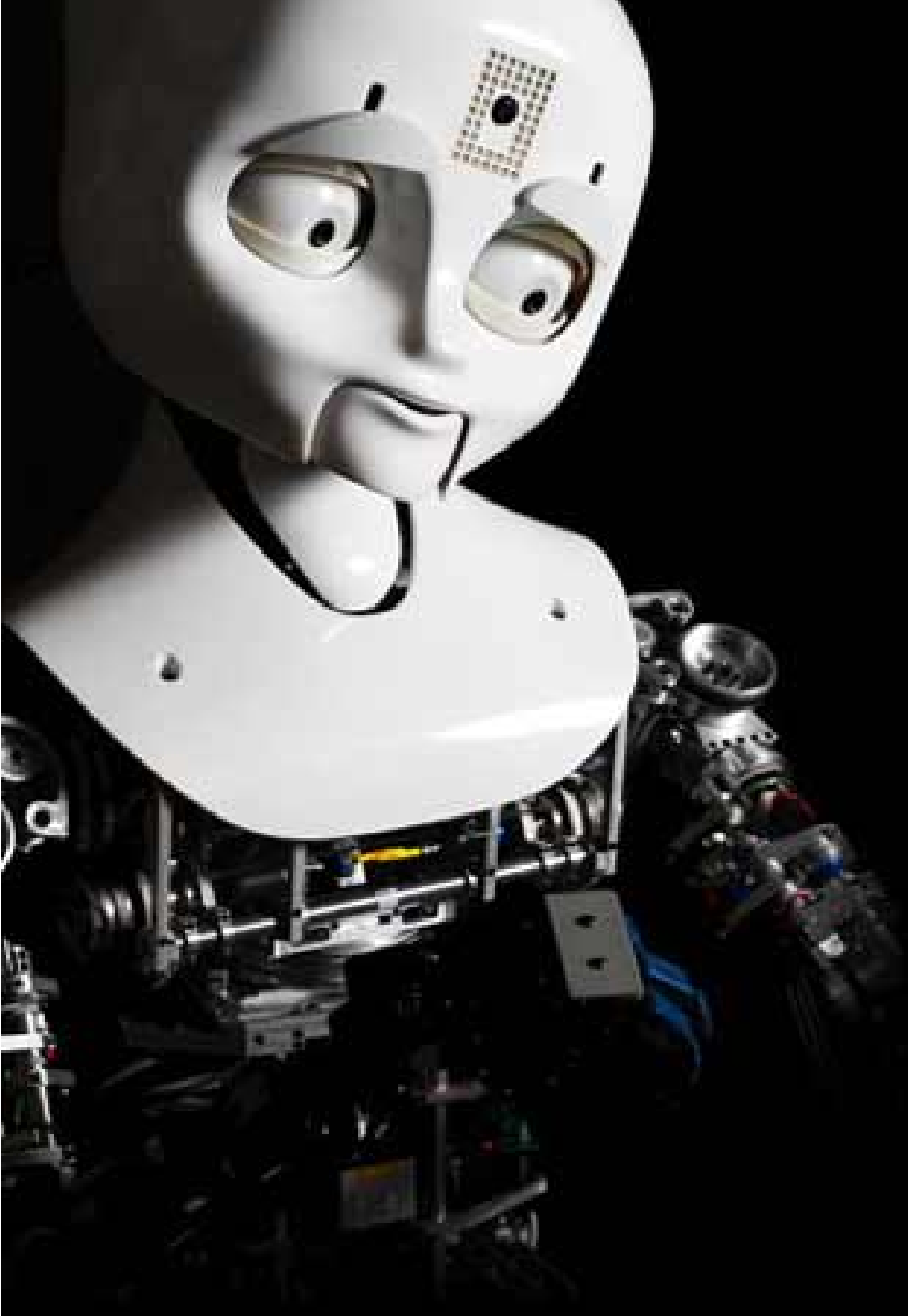
Asimo (Honda) evolution



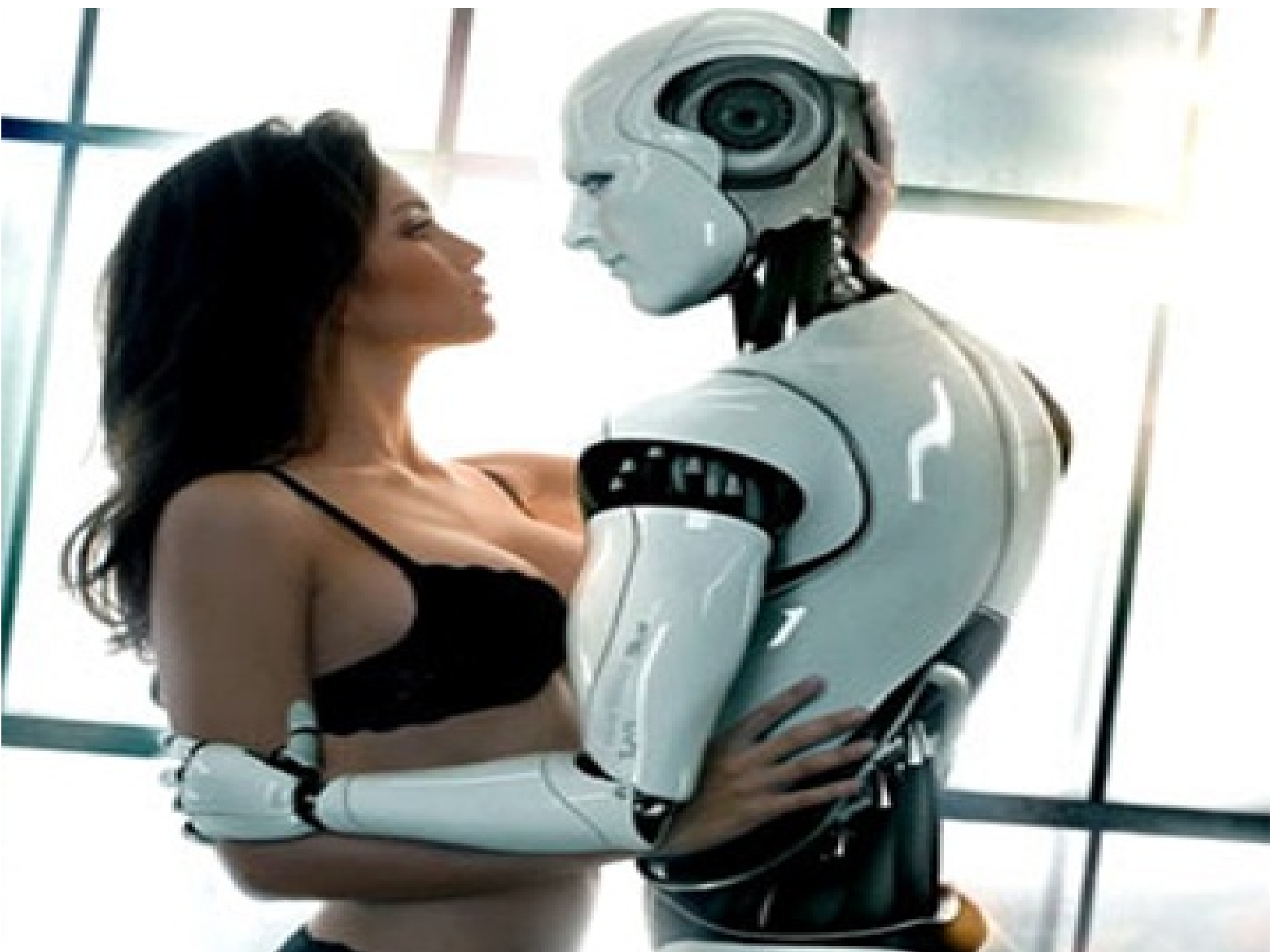
ASIMO
The Honda Humanoid Robot ASIMO

History
Robot Development Process

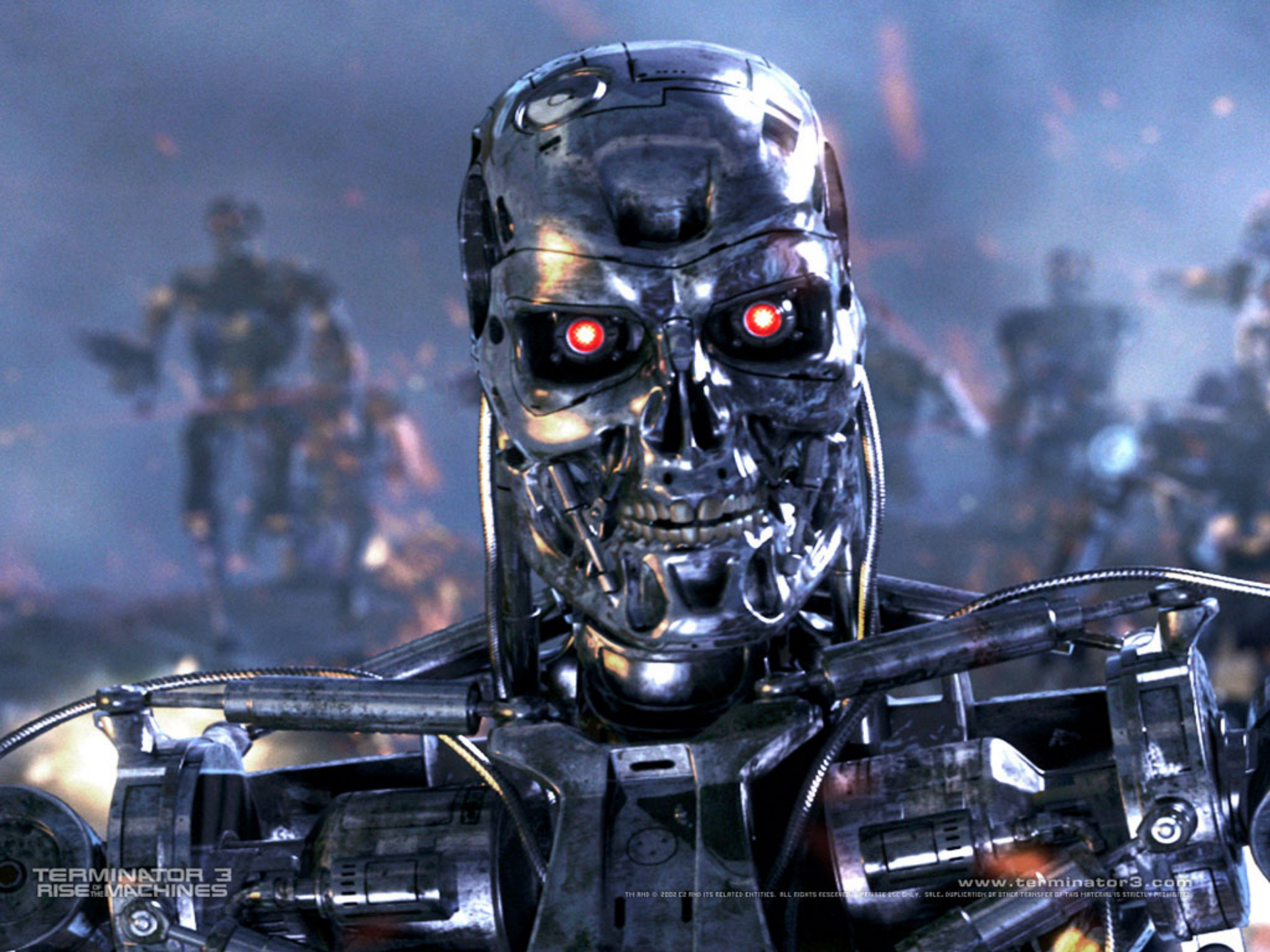












TERMINATOR 3
RISE OF THE MACHINES

www.terminator3.com

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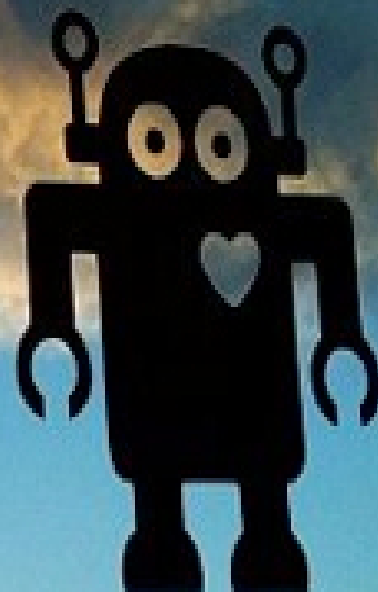


TERMINATOR 3

RISE OF THE MACHINES

THE WAR BEGINS JULY 2





Robots are **good** in Japan

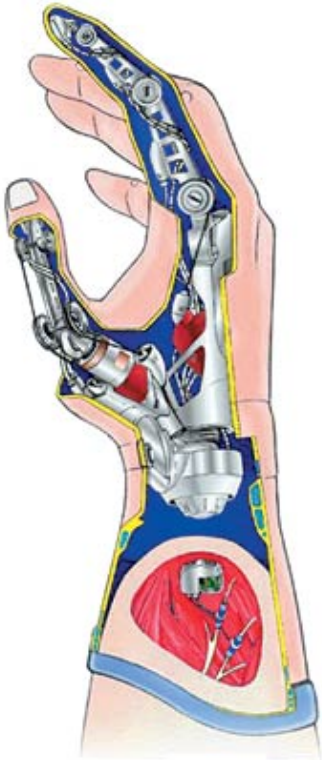
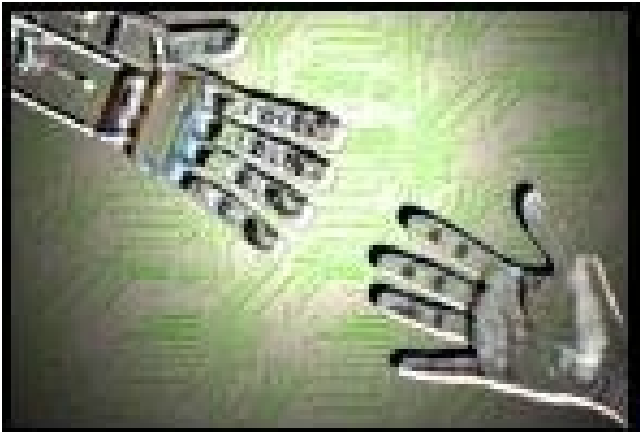


TOYOTA PARTNER ROBOT



Humans **or** machines!

Humans **AND** machines?



Oscar Pistorius: “**Blade runner**” in London 2012 Olympic Games



World Cup in Brazil: 2014





Superman?

**Christopher
Reeve
(paraplegic)**



Stephen Hawking



Michael J. Fox: **Back to the Future**



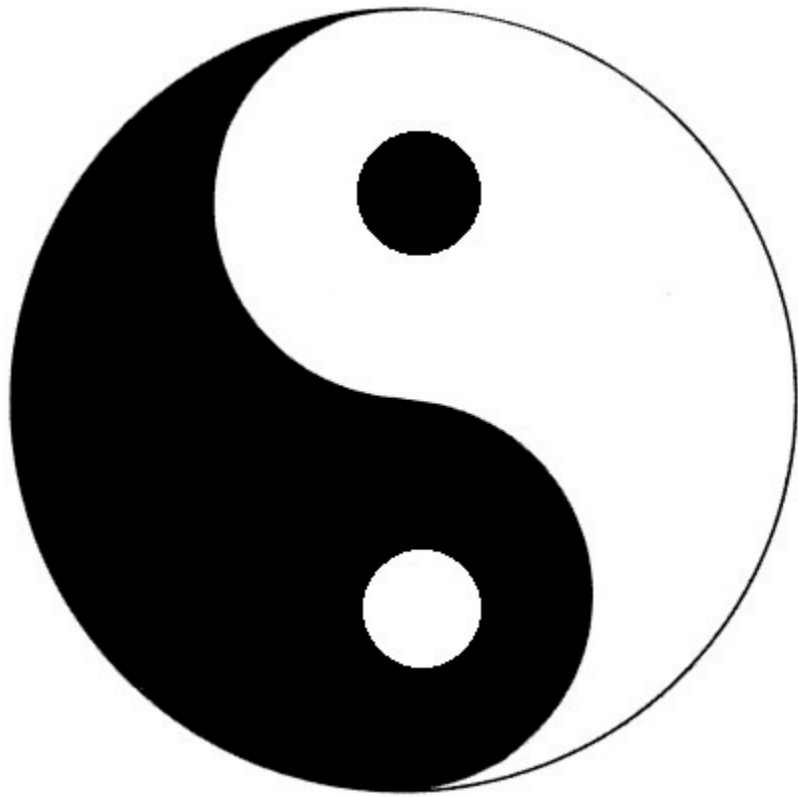
Ronald Reagan: **Alzheimer's**



(CNN)

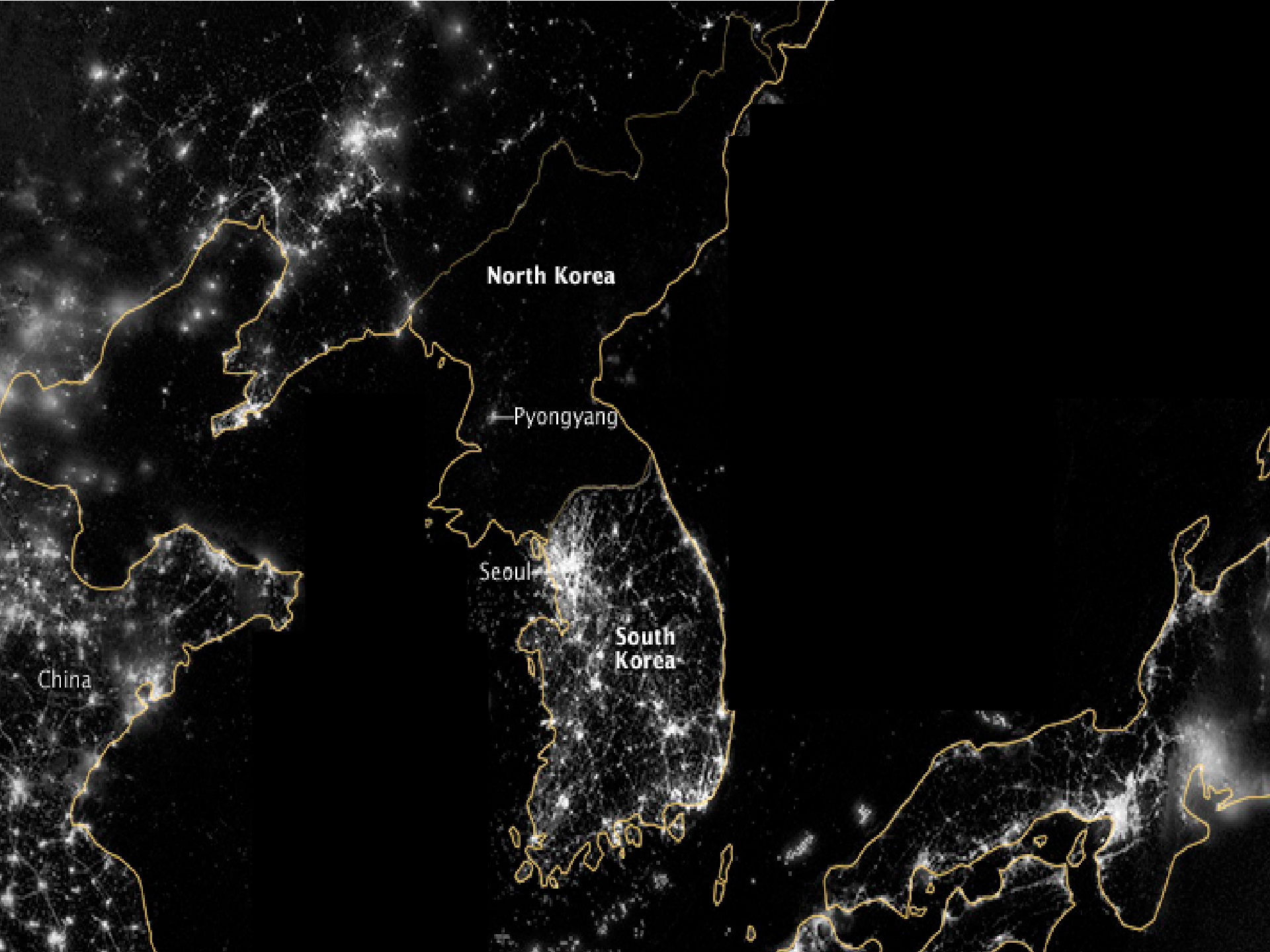


Yin-yang 阴阳 (and more yin-yang)



Light up the world





North Korea

Pyongyang

Seoul

South Korea

China

The world is one



Guru Cordeiro meditating in India (Hinduism) and in Japan (Buddhism)



**1º Seminário de Avaliação Institucional
UNIFESP**

**1º Seminário de Avaliação
Institucional UNIFESP**

Conferência: The Singularity
University e as Novas
Fronteiras do Conhecimento

**Conferência: The Singularity University e as Novas Fronteiras
do Conhecimento"**

No dia 10/04/2014 será realizado (quinta-feira) no Anfiteatro
Leitão da Cunha , a conferência " The Singularity University
e as Novas Fronteiras do Conhecimento" com o
Conferencista José Luis Cordeiro, Singularity University, Nasa
Research Park, CA, USA,

**" The Singularity University e as Novas Fronteiras do
Conhecimento"**



Local : Anfiteatro Leitão da Cunha

Endereço: (Rua Botucatu, 740 - Campus São Paulo)

Horário : das 11:00 às 12:30



O fim chegou ao fim: *a ciência revela a* *Imortalidade*



com
Dr. José Luis Cordeiro



Muito obrigado!
www.cordeiro.org